See and control your search & browsing activity

Your searches and browsing history are saved to your Google Account if Web & App Activity is turned on. When Web & App Activity is on, you may get better search results and recommendations across Google services.

You're in control of what's saved, and you can delete your past searches and browsing activity or turn off Web & App Activity at any time.

Turn Web & App Activity on or off

See or delete your Web & App Activity

You can find and delete your searches and browsing activity by visiting My Activity. Learn more about how to view and control activity or how to delete activity.

What's saved as Web & App Activity

Web & App Activity

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Search and Maps
- Your connection information, including location, language, and whether you use a browser or an app
- Ads you respond to by clicking the ad itself or buying something on the advertiser's site
- Your IP address
- Results that are returned, including results from information on your device (like recent apps or contact names you searched for) and search results from other Google products

Note: Activity may be saved even when you're offline.

Activity from Chrome, websites, and apps

When Web & App Activity is on and you check the box next to "Include Chrome browsing history and activity from websites and apps that use Google services," Google saves information like:

- Your Chrome browsing history. This information helps you see more accurate search results and suggestions. For example, if you read a lot of articles about your favorite sports team, you might see an option to receive news updates about that team. **Note:** Your Chrome history is only saved if you're signed in to your Google Account and have Chrome Sync turned on.
- Websites and apps you use and the data they share with Google. This information lets you see things you've looked at on other websites and apps in your Google search results.
- Your activity on websites and in apps that use Google services. These services include things like embedded maps and search boxes, and ads served by Google on other sites and apps.

Note: Not all websites and apps save Web & App Activity in your account.

How your saved activity is used

Learn more about how Google uses your saved activity and how we keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ.

How Web & App Activity works when you're signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately.

Browser history

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari, Internet Explorer, or Firefox.

PRODBEG: GOOG-RDGZ-00000162
PRODEND: GOOG-RDGZ-00000162
PRODBEGATT:
PRODENDATT:
CUSTODIAN/SOURCE:
DOCTYPE:
FILENAME:
DOCEXT:
DOC TYPE:
PAGES: 1
FILE SIZE:
AUTHOR:
DATECREATED:
DATELASTMOD:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
CONFIDENTIALITY:
PRODVOL:
REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000162
PRODEND: GOOG-RDGZ-00000162
PRODBEGATT:
PRODENDATT:
PARENTBATES:
ATTACH:
NUMATTACH:
CUSTODIAN/SOURCE:
ALLCUSTODIANS:
DOCTYPE:
DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
AUTHOR:
OWNER:
DATECREATED:
CREATEDTIME:
DateTimeCreated:
DATELASTMOD:
LASTMODTIME:
DateTimeMod:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See and control your search & browsing activity

Your searches and browsing history are saved to your Google Account if Web & App Activity is turned on. When Web & App Activity is on, you may get better search results and recommendations across Google services.

You're in control of whatâ€™s saved, and you can delete your past searches and browsing activity or turn off Web & App Activity at any time.

Turn Web & App Activity on or off

See or delete your Web & App Activity

You can find and delete your searches and browsing activity by visiting My Activity. Learn more about how to view and control activity or how to delete activity.

Whatâ€™s saved as Web & App Activity

Web & App Activity

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Search and Maps
- Your connection information, including location, language, and whether you use a browser or an app
- Ads you respond to by clicking the ad itself or buying something on the advertiserâ€™s site
- Your IP address
- Results that are returned, including results from information on your device (like recent apps or contact names you searched for) and search results from other Google products

Note: Activity may be saved even when youâ€™re offline.

Activity from Chrome, websites, and apps

When Web & App Activity is on and you check the box next to "Include Chrome browsing history and activity from websites and apps that use Google services," Google saves information like:

- Your Chrome browsing history. This information helps you see more accurate search results and suggestions. For example, if you read a lot of articles about your favorite sports team, you might see an option to receive news updates about that team. **Note:** Your Chrome history is only saved if youâ€™re signed in to your Google Account and have Chrome Sync turned on.
- Websites and apps you use and the data they share with Google. This information lets you see things you've looked at on other websites and apps in your Google search results.
- Your activity on websites and in apps that use Google services. These services include things like embedded maps and search boxes, and ads served by Google on other sites and apps.

Note: Not all websites and apps save Web & App Activity in your account.

How your saved activity is used

Learn more about how Google uses your saved activity and how we keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ.

How Web & App Activity works when youâ€™re signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately.

Browser history

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari, Internet Explorer, or Firefox.

GOOG-RDGZ-00000299

PRODBEG: GOOG-RDGZ-00000299
PRODEND: GOOG-RDGZ-00000299
PRODBEGATT:
PRODENDATT:
CUSTODIAN/SOURCE:
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DOCEXT:
DOC TYPE:
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FILE SIZE:
AUTHOR:
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REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000299
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PAGES: 1
FILE SIZE:
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FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See and control your search & browsing activity

Your searches and browsing history are saved to your Google Account if Web & App Activity is turned on. When Web & App Activity is on, you may get better search results and recommendations across Google services.

You're in control of whatâ€™s saved, and you can delete your past searches and browsing activity or turn off Web & App Activity at any time.

See or delete your Web & App Activity

You can find and delete your searches and browsing activity by visiting <u>My Activity</u>. Learn more about <u>how to view and control activity</u> or <u>how to delete activity</u>.

Whatâ€™s saved as Web & App Activity

Web & App Activity

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Search and Maps
- Your connection information, including location, language, and whether you use a browser or an app
- Ads you respond to by clicking the ad itself or buying something on the advertiserâ€™s site
- Your IP address
- Results that are returned, including results from information on your device (like recent apps or contact names you searched for) and <u>search results from other Google products</u>

Note: Activity may be saved even when youâ€™re offline.

Activity from Chrome, websites, and apps

When Web & App Activity is on and you check the box next to "Include Chrome browsing history and activity from websites and apps that use Google services," Google saves information like:

- Your Chrome browsing history. This information helps you see more accurate search results and suggestions. For example, if you read a lot of articles about your favorite sports team, you might see an option to receive news updates about that team. **Note:** Your Chrome history is only saved if youâ€™re signed in to your Google Account and have <u>Chrome Sync turned on</u>.
- Websites and apps you use and the data they share with Google. This information lets you see things you've looked at on other websites and apps in your Google search results.
- Your activity on websites and in apps that use Google services. These services include things like embedded maps and search boxes, and ads served by Google on other sites and apps.

Note: Not all websites and apps save Web & App Activity in your account.

How your saved activity is used

Learn more about <u>how Google uses your saved activity</u> and how we keep it private.

For more information about how Google treats search queries generally, see the <u>Privacy Policy FAQ</u>.

How Web & App Activity works when youâ€™re signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can <u>search and browse privately</u>.

Browser history

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on <u>Chrome</u>, <u>Toolbar</u>, <u>Safari</u>, <u>Internet Explorer</u>, or <u>Firefox</u>.

GOOG-RDGZ-00000232

PRODBEG: GOOG-RDGZ-00000232
PRODEND: GOOG-RDGZ-00000232
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FILE SIZE:
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REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000232
PRODEND: GOOG-RDGZ-00000232
PRODBEGATT:
PRODENDATT:
PARENTBATES:
ATTACH:
NUMATTACH:
CUSTODIAN/SOURCE:
ALLCUSTODIANS:
DOCTYPE:
DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
AUTHOR:
OWNER:
DATECREATED:
CREATEDTIME:
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DATELASTMOD:
LASTMODTIME:
DateTimeMod:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See and control your search & browsing activity

Your searches and activity from other Google services are saved to your Google Account if Web & App Activity is turned on. When Web & App Activity is on, you may get better search results and suggestions. You're in control of whatâ€™s saved, and you can delete your past searches and activity or turn off Web & App Activity at any time.

Note: To use the Google Assistant, Web & App Activity must be turned on.

See or delete your Web & App Activity

You can find and delete your searches and browsing activity by visiting My Activity. Learn more about how to view and control activity or how to delete activity.

Whatâ€™s saved as Web & App Activity

Web & App Activity

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Search and Maps
- Your connection information, including location, language, and whether you use a browser or an app
- Ads you respond to by clicking the ad itself or buying something on the advertiserâ€™s site
- Your IP address
- Results that are returned, including results from information on your device (like recent apps or contact names you searched for) and search results from other Google products

Note: Activity may be saved even when youâ€™re offline.

Activity from Chrome, websites, and apps

When Web & App Activity is on and you check the box next to "Include Chrome browsing history and activity from websites and apps that use Google services," Google saves information like:

- Your Chrome browsing history. This information helps you see more accurate search results and suggestions. For example, if you read a lot of articles about your favorite sports team, you might see an option to receive news updates about that team. **Note**: Your Chrome history is only saved if youâ€™re signed in to your Google Account and have Chrome Sync turned on.
- Websites and apps you use and the data they share with Google. This information lets you see things you've looked at on other websites and apps in your Google search results.
- Your activity on websites and in apps that use Google services. These services include things like embedded maps and search boxes, and ads served by Google on other sites and apps.

Note: Not all websites and apps save Web & App Activity in your account.

How your saved activity is used

Learn more about how Google uses your saved activity and how we keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ.

How Web & App Activity works when youâ€™re signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately.

Browser history

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari, Internet Explorer, or Firefox.

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BCC:
DATESENT:
CONFIDENTIALITY:
PRODVOL:
REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000186
PRODEND: GOOG-RDGZ-00000186
PRODBEGATT:
PRODENDATT:
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NUMATTACH:
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ALLCUSTODIANS:
DOCTYPE:
DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
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OWNER:
DATECREATED:
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DateTimeCreated:
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LASTMODTIME:
DateTimeMod:
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SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See and control your search activity

Your searches and activity from other Google services are saved to your Google Account if Web & App Activity is turned on. When Web & App Activity is on, you may get better search results and suggestions.

You're in control of whatâ€™s saved, and you can delete your past searches and activity or turn off Web & App Activity at any time.

See or delete your Web & App Activity

You can find and delete your searches and browsing activity by visiting My Activity. Learn more about how to view and control activity or how to delete activity.

Whatâ€™s saved as Web & App Activity

Web & App Activity

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Search and Maps
- Your connection information, including location, language, and whether you use a browser or an app
- Ads you respond to by clicking the ad itself or buying something on the advertiserâ€™s site
- Your IP address
- Results that are returned, including results from information on your device (like recent apps or contact names you searched for) and search results from other Google products

Note: Activity may be saved even when youâ€™re offline.

Activity from Chrome, websites, and apps

When Web & App Activity is on and you check the box next to "Include Chrome browsing history and activity from websites and apps that use Google services," Google saves information like:

- Your Chrome browsing history. This information helps you see more accurate search results and suggestions. For example, if you read a lot of articles about your favorite sports team, you might see an option to receive news updates about that team. **Note:** Your Chrome history is only saved if youâ€™re signed in to your Google Account and have Chrome Sync turned on.
- Websites and apps you use and the data they share with Google. This information lets you see things you've looked at on other websites and apps in your Google search results.
- Your activity on websites and in apps that use Google services. These services include things like embedded maps and search boxes, and ads served by Google on other sites and apps.

Note: Not all websites and apps save Web & App Activity in your account.

How your saved activity is used

Learn more about how Google uses your saved activity and how we keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ.

How Web & App Activity works when youâ€™re signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately.

Browser history

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari, Internet Explorer, or Firefox.

GOOG-RDGZ-00000228

PRODBEG: GOOG-RDGZ-00000228
PRODEND: GOOG-RDGZ-00000228
PRODBEGATT:
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CUSTODIAN/SOURCE:
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FILENAME:
DOCEXT:
DOC TYPE:
PAGES: 1
FILE SIZE:
AUTHOR:
DATECREATED:
DATELASTMOD:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
CONFIDENTIALITY:
PRODVOL:
REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000228
PRODEND: GOOG-RDGZ-00000228
PRODBEGATT:
PRODENDATT:
PARENTBATES:
ATTACH:
NUMATTACH:
CUSTODIAN/SOURCE:
ALLCUSTODIANS:
DOCTYPE:
DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
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OWNER:
DATECREATED:
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DATELASTMOD:
LASTMODTIME:
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DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See and control your search activity

If Web & App Activity is turned on, your searches and activity from other Google services are saved to your Google Account, so you may get better search results and suggestions.

You control whatâ€™s saved, and you can delete your past searches and activity or turn off Web & App Activity at any time.

See or delete your search activity

You can find and delete your searches and browsing activity by visiting My Activity. Learn more about how to view and control activity or how to delete activity.

Whatâ€™s saved as Web & App Activity

Info about your searches and more

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Maps
- Your location, language, IP address, and whether you use a browser or an app
- Ads you click, or things you buy on an advertiserâ€™s site
- Information on your device like recent apps or contact names you searched for

Note: Activity may be saved even when youâ€™re offline.

Info about your browsing and more

Google can save information like:

- Websites and apps you use
- Your activity on websites and in apps that use Google services
- Your Chrome browsing history

To let Google save this information, Web & App Activity must be on, and the box next "Include Chrome browsing history and activity from websites and apps that use Google services" must be checked.

Note: Your Chrome history is only saved if youâ€™re signed in to your Google Account and have Chrome Sync turned on.

How your saved activity is used

Learn more about how Google uses your saved activity and helps keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ.

How Web & App Activity works when youâ€™re signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately.

Browser history

In the Activity controls page, you can also check the box to "Include Chrome browsing history and activity from websites and apps that use Google services." When this box is checked, you can control whether activity from your device is saved.

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari, Internet Explorer, or Firefox.

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PRODEND: GOOG-RDGZ-00000097
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REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000097
PRODEND: GOOG-RDGZ-00000097
PRODBEGATT:
PRODENDATT:
PARENTBATES:
ATTACH:
NUMATTACH:
CUSTODIAN/SOURCE:
ALLCUSTODIANS:
DOCTYPE:
DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
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SUBJECT:
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TO:
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BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See and control your search activity

If Web & App Activity is turned on, your searches and activity from other Google services are saved to your Google Account, so you may get better search results and suggestions.

You control whatâ€™s saved, and you can delete your past searches and activity or turn off Web & App Activity at any time.

Turn Web & App Activity on or off

Computer

Android

iPhone or iPad

See or delete your search activity

You can find and delete your searches and browsing activity by visiting My Activity. Learn more about how to view and control activity or how to delete activity.

Whatâ€™s saved as Web & App Activity

Info about your searches and more

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Maps
- Your location, language, IP address, and whether you use a browser or an app
- Ads you click, or things you buy on an advertiserâ€™s site
- Information on your device like recent apps or contact names you searched for

Note: Activity may be saved even when youâ€™re offline.

Info about your browsing and more

Google can save information like:

- Websites and apps you use
- Your activity on websites and in apps that use Google services
- Your Chrome browsing history

To let Google save this information, Web & App Activity must be on, and the box next "Include Chrome browsing history and activity from websites and apps that use Google services" must be checked.

Note: Your Chrome history is only saved if youâ€™re signed in to your Google Account and have Chrome Sync turned on.

How your saved activity is used

Learn more about how Google uses your saved activity and helps keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ.

How Web & App Activity works when youâ€™re signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately.

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DOCEXT:
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DATECREATED:
DATELASTMOD:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
CONFIDENTIALITY:
PRODVOL:
REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000292
PRODEND: GOOG-RDGZ-00000292
PRODBEGATT:
PRODENDATT:
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LASTMODTIME:
DateTimeMod:
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SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See and control your search activity

If Web & App Activity is turned on, your searches and activity from other Google services are saved to your Google Account, so you may get better search results and suggestions.

You control whatâ€™s saved, and you can delete your past searches and activity or turn off Web & App Activity at any time.

Note: If you got your Google Account through work or school, you may need to contact your administrator to turn on Web & App Activity.

See or delete your search activity

You can find and delete your searches and browsing activity by visiting <u>My Activity</u>. Learn more about <u>how to view and control activity</u> or <u>how to delete activity</u>.

Whatâ€™s saved as Web & App Activity

Info about your searches and more

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Maps
- Your location, language, IP address, and whether you use a browser or an app
- Ads you click, or things you buy on an advertiserâ€™s site
- Information on your device like recent apps or contact names you searched for

Note: Activity may be saved even when youâ€™re offline.

Info about your browsing and more

Google can save information like:

- Websites and apps you use
- Your activity on websites and in apps that use Google services
- Your Chrome browsing history

To let Google save this information, Web & App Activity must be on, and the box next "Include Chrome browsing history and activity from websites and apps that use Google services" must be checked.

Note: Your Chrome history is only saved if youâ€™re signed in to your Google Account and have <u>Chrome Sync turned on</u>.

How your saved activity is used

Learn more about <u>how Google uses your saved activity</u> and helps keep it private.

For more information about how Google treats search queries generally, see the <u>Privacy Policy FAQ</u>.

How Web & App Activity works when youâ€™re signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can <u>search and browse privately</u>.

Browser history

In the <u>Activity controls</u> page, you can also check the box to "Include Chrome browsing history and activity from websites and apps that use Google services." When this box is checked, you can control whether activity from your device is saved.

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on <u>Chrome</u>, <u>Toolbar</u>, <u>Safari</u>, <u>Internet Explorer</u>, or <u>Firefox</u>.

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DATELASTMOD:
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FROM:
TO:
CC:
BCC:
DATESENT:
CONFIDENTIALITY:
PRODVOL:
REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000098
PRODEND: GOOG-RDGZ-00000098
PRODBEGATT:
PRODENDATT:
PARENTBATES:
ATTACH:
NUMATTACH:
CUSTODIAN/SOURCE:
ALLCUSTODIANS:
DOCTYPE:
DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
AUTHOR:
OWNER:
DATECREATED:
CREATEDTIME:
DateTimeCreated:
DATELASTMOD:
LASTMODTIME:
DateTimeMod:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See and control your search activity

If Web & App Activity is turned on, your searches and activity from other Google services are saved to your Google Account, so you may get better search results and suggestions.

You control whatâ€™s saved, and you can delete your past searches and activity or turn off Web & App Activity at any time.

Note: If you got your Google Account through work or school, you may need to contact your administrator to turn on Web & App Activity.

See or delete your search activity

You can find and delete your searches and browsing activity by visiting My Activity. Learn more about how to view and control activity or how to delete activity.

Whatâ€™s saved as Web & App Activity

Info about your searches and more

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Maps
- Your location, language, IP address, and whether you use a browser or an app
- Ads you click, or things you buy on an advertiserâ€™s site
- Information on your device like recent apps or contact names you searched for

Note: Activity may be saved even when youâ€™re offline.

Info about your browsing and more

Google can save information like:

- Websites and apps you use
- Your activity on websites and in apps that use Google services
- Your Chrome browsing history

To let Google save this information, Web & App Activity must be on, and the box next "Include Chrome browsing history and activity from websites and apps that use Google services" must be checked.

Note: Your Chrome history is only saved if youâ€™re signed in to your Google Account and have Chrome Sync turned on.

How your saved activity is used

Learn more about how Google uses your saved activity and helps keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ.

How Web & App Activity works when youâ€™re signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately.

Browser history

In the Activity controls page, you can also check the box to "Include Chrome browsing history and activity from websites and apps that use Google services." When this box is checked, you can control whether activity from your device is saved.

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari, Internet Explorer, or Firefox.

PRODBEG: GOOG-RDGZ-00000133
PRODEND: GOOG-RDGZ-00000133
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PRODENDATT:
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FILENAME:
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DOC TYPE:
PAGES: 1
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AUTHOR:
DATECREATED:
DATELASTMOD:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
CONFIDENTIALITY:
PRODVOL:
REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000133
PRODEND: GOOG-RDGZ-00000133
PRODBEGATT:
PRODENDATT:
PARENTBATES:
ATTACH:
NUMATTACH:
CUSTODIAN/SOURCE:
ALLCUSTODIANS:
DOCTYPE:
DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
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OWNER:
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CREATEDTIME:
DateTimeCreated:
DATELASTMOD:
LASTMODTIME:
DateTimeMod:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See and control your search activity

If Web & App Activity is turned on, your searches and activity from other Google services are saved to your Google Account, so you may get better search results and suggestions.

You control whatâ€™s saved, and you can delete your past searches and activity or turn off Web & App Activity at any time.

Note: If you got your Google Account through work or school, you may need to contact your administrator to turn on Web & App Activity service for your organization.

See or delete your search activity

You can find and delete your searches and browsing activity by visiting My Activity. Learn more about how to view and control activity or how to delete activity.

Whatâ€™s saved as Web & App Activity

Info about your searches and more

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Maps
- Your location, language, IP address, and whether you use a browser or an app
- Ads you click, or things you buy on an advertiserâ€™s site
- Information on your device like recent apps or contact names you searched for

Note: Activity may be saved even when youâ€™re offline.

Info about your browsing and more

Google can save information like:

- Websites and apps you use
- Your activity on websites and in apps that use Google services
- Your Chrome browsing history

To let Google save this information, Web & App Activity must be on, and the box next "Include Chrome browsing history and activity from websites and apps that use Google services" must be checked.

Note: Your Chrome history is only saved if youâ€™re signed in to your Google Account and have Chrome Sync turned on.

How your saved activity is used

Learn more about how Google uses your saved activity and helps keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ.

How Web & App Activity works when youâ€™re signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately.

Browser history

In the Activity controls page, you can also check the box to "Include Chrome browsing history and activity from websites and apps that use Google services." When this box is checked, you can control whether activity from your device is saved.

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari, Internet Explorer, or Firefox.

PRODBEG: GOOG-RDGZ-00000206
PRODEND: GOOG-RDGZ-00000206
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PRODENDATT:
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DOC TYPE:
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FILE SIZE:
AUTHOR:
DATECREATED:
DATELASTMOD:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
CONFIDENTIALITY:
PRODVOL:
REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000206
PRODEND: GOOG-RDGZ-00000206
PRODBEGATT:
PRODENDATT:
PARENTBATES:
ATTACH:
NUMATTACH:
CUSTODIAN/SOURCE:
ALLCUSTODIANS:
DOCTYPE:
DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
AUTHOR:
OWNER:
DATECREATED:
CREATEDTIME:
DateTimeCreated:
DATELASTMOD:
LASTMODTIME:
DateTimeMod:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See & control your search activity

If Web & App Activity is turned on, your searches and activity from other Google services are saved to your Google Account, so you may get better search results and suggestions.

You control what's saved. And you can delete your past searches and activity or turn off Web & App Activity at any time.

Note: If you got your Google Account through work or school, you could need to contact your administrator to turn on the Web & App Activity service for your organization.

See or delete your search activity

You can find and delete your searches and browsing activity by visiting My Activity. Learn more about how to view and control activity or how to delete activity.

What's saved as Web & App Activity

Info about your searches & more

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Maps
- Your location, language, IP address, referrer, and whether you use a browser or an app
- Ads you click, or things you buy on an advertiser's site
- Information on your device like recent apps or contact names you searched for

Note: Activity could be saved even when you're offline.

Info about your browsing & more

Google can save information like:

- Websites and apps you use
- Your activity on websites and in apps that use Google services
- Your Chrome browsing history

To let Google save this information:

- Web & App Activity must be on.
- The box next to "Include Chrome browsing history and activity from websites and apps that use Google services" must be checked.

Your Chrome history is saved only if you're signed in to your Google Account and have Chrome Sync turned on. Learn about Chrome Sync.

Note: If you use a shared device or sign in with more than one account, activity might be saved to the default account on the browser or device you use.

How your saved activity is used

Learn more about how Google uses your saved activity and helps keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ.

How Web & App Activity works when you're signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately. Learn how.

Browser history

In the Activity controls page, you can also check the box to "Include Chrome browsing history and activity from websites and apps that use Google services." When this box is checked, you can control whether activity from your device is saved.

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari, Internet Explorer, or Firefox.

PRODBEG: GOOG-RDGZ-00000294
PRODEND: GOOG-RDGZ-00000294
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AUTHOR:
DATECREATED:
DATELASTMOD:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
CONFIDENTIALITY:
PRODVOL:
REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000294
PRODEND: GOOG-RDGZ-00000294
PRODBEGATT:
PRODENDATT:
PARENTBATES:
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NUMATTACH:
CUSTODIAN/SOURCE:
ALLCUSTODIANS:
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DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
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CREATEDTIME:
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DATELASTMOD:
LASTMODTIME:
DateTimeMod:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See & control your search activity

If Web & App Activity is turned on, your searches and activity from other Google services are saved to your Google Account, so you may get better search results and suggestions.

You control what's saved. And you can delete your past searches and activity or turn off Web & App Activity at any time.

Note: If you got your Google Account through work or school, you could need to contact your administrator to turn on the Web & App Activity service for your organization.

What's saved as Web & App Activity

Info about your searches & more

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Maps
- Your location, language, IP address, referrer, and whether you use a browser or an app
- Ads you click, or things you buy on an advertiser's site
- Information on your device like recent apps or contact names you searched for

Note: Activity could be saved even when you're offline.

Info about your browsing & more

Google can save information like:

- Websites and apps you use
- Your activity on websites and in apps that use Google services
- Your Chrome browsing history

To let Google save this information:

- Web & App Activity must be on.
- The box next to "Include Chrome browsing history and activity from websites and apps that use Google services" must be checked.

Your Chrome history is saved only if you're signed in to your Google Account and have Chrome Sync turned on. Learn about Chrome Sync.

Note: If you use a shared device or sign in with more than one account, activity might be saved to the default account on the browser or device you use.

How your saved activity is used

Learn more about how Google uses your saved activity and helps keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ.

How Web & App Activity works when you're signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately. Learn how.

Browser history

In the Activity controls page, you can also check the box to "Include Chrome browsing history and activity from websites and apps that use Google services." When this box is checked, you can control whether activity from your device is saved.

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari, Internet Explorer, or Firefox.

PRODBEG: GOOG-RDGZ-00000167
PRODEND: GOOG-RDGZ-00000167
PRODBEGATT:
PRODENDATT:
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FILENAME:
DOCEXT:
DOC TYPE:
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BCC:
DATESENT:
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PRODVOL:
REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000167
PRODEND: GOOG-RDGZ-00000167
PRODBEGATT:
PRODENDATT:
PARENTBATES:
ATTACH:
NUMATTACH:
CUSTODIAN/SOURCE:
ALLCUSTODIANS:
DOCTYPE:
DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
AUTHOR:
OWNER:
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DateTimeCreated:
DATELASTMOD:
LASTMODTIME:
DateTimeMod:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See & control your Web & App Activity

If Web & App Activity is turned on, your searches and activity from other Google services are saved in your Google Account, so you may get more personalized experiences, like faster searches and more helpful app and content recommendations.

You can turn Web & App Activity off or delete past activity at any time.

Note: If you got your Google Account through work or school, you could need to contact your administrator to turn on the Web & App Activity additional service for your organization.

Whatâ€™s saved as Web & App Activity

Info about your searches & more

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Maps
- Your location, language, IP address, referrer, and whether you use a browser or an app
- Ads you click, or things you buy on an advertiserâ€™s site
- Information on your device like recent apps or contact names you searched for

Note: Activity could be saved even when youâ€™re offline.

Info about your browsing & more

Google can save information like:

- Sites and apps you use
- Your activity on sites and in apps that use Google services
- Your Chrome browsing history

To let Google save this information:

- Web & App Activity must be on.
- The box next to "Include Chrome history and activity from sites, apps, and devices that use Google services" must be checked.

Your Chrome history is saved only if youâ€™re signed in to your Google Account and have Chrome Sync turned on. Learn about Chrome Sync.

Note: If you use a shared device or sign in with more than one account, activity might be saved to the default account on the browser or device you use.

How your saved activity is used

Learn more about how Google uses your saved activity and helps keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ.

How Web & App Activity works when youâ€™re signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately. Learn how.

Browser history

In the Activity controls page, you can also check the box to "Include Chrome history and activity from sites, apps, and devices that use Google services." When this box is checked, you can control whether activity from your device is saved.

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari, Internet Explorer, or Firefox.

PRODBEG: GOOG-RDGZ-00000231
PRODEND: GOOG-RDGZ-00000231
PRODBEGATT:
PRODENDATT:
CUSTODIAN/SOURCE:
DOCTYPE:
FILENAME:
DOCEXT:
DOC TYPE:
PAGES: 1
FILE SIZE:
AUTHOR:
DATECREATED:
DATELASTMOD:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
CONFIDENTIALITY:
PRODVOL:
REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000231
PRODEND: GOOG-RDGZ-00000231
PRODBEGATT:
PRODENDATT:
PARENTBATES:
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NUMATTACH:
CUSTODIAN/SOURCE:
ALLCUSTODIANS:
DOCTYPE:
DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
AUTHOR:
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DATELASTMOD:
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DateTimeMod:
DOCTITLE:
SUBJECT:
FROM:
TO:
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DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See & control your Web & App Activity

If Web & App Activity is turned on, your searches and activity from other Google services are saved in your Google Account, so you may get more personalized experiences, like faster searches and more helpful app and content recommendations.

You can turn Web & App Activity off or delete past activity at any time.

Note: If you got your Google Account through work or school, you might need to contact your administrator to turn on the Web & App Activity <u>additional</u> service for your organization.

Whatâ€™s saved as Web & App Activity

Info about your searches and other activity on Google sites, apps, and services

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Maps and Play
- Your location, language, IP address, referrer, and whether you use a browser or an app
- Ads you click, or things you buy on an advertiserâ€™s site
- Information on your device like recent apps or contact names you searched for

Note: Activity could be saved even when youâ€™re offline.

Info about your browsing and other activity on sites, apps, and devices that use Google services

When Web & App Activity is on, you can include additional activity like:

- Sites and apps that partner with Google to show ads
- Sites and apps that use Google services, including data that apps share with Google
- Your Chrome browsing history
- Android usage & diagnostics, like battery level and system errors

To let Google save this information:

- Web & App Activity must be on.
- The box next to "Include Chrome history and activity from sites, apps, and devices that use Google services" must be checked.

Your Chrome history is saved only if youâ€™re signed in to your Google Account and have Chrome Sync turned on. <u>Learn about Chrome Sync</u>.

Note: If you use a shared device or sign in with more than one account, activity might be saved to the default account on the browser or device you use.

Voice and audio recordings

When Web & App Activity is on, you can include voice and audio recordings as part of your activity. <u>Learn about voice and audio recordings</u>.

To let Google save this information:

- Web & App Activity must be on.
- The box next to "Include voice and audio recordings" must be checked.

How your saved activity is used

Learn more about <u>how Google uses your saved activity</u> and helps keep it private.

For more information about how Google treats search queries generally, see the <u>Privacy Policy FAQ</u>.

How Web & App Activity works when youâ€™re signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately. <u>Learn how</u>.

Browser history

In the <u>Activity controls</u> page, you can also check the box to "Include Chrome history and activity from sites, apps, and devices that use Google services." When this box is checked, you can control whether activity from your device is saved.

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on <u>Chrome</u>, <u>Toolbar</u>, <u>Safari</u>, <u>Internet Explorer</u>, or <u>Firefox</u>.

PRODBEG: GOOG-RDGZ-00000120
PRODEND: GOOG-RDGZ-00000120
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AUTHOR:
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DATELASTMOD:
DOCTITLE:
SUBJECT:
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CC:
BCC:
DATESENT:
CONFIDENTIALITY:
PRODVOL:
REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000120
PRODEND: GOOG-RDGZ-00000120
PRODBEGATT:
PRODENDATT:
PARENTBATES:
ATTACH:
NUMATTACH:
CUSTODIAN/SOURCE:
ALLCUSTODIANS:
DOCTYPE:
DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
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DATELASTMOD:
LASTMODTIME:
DateTimeMod:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

See & control your Web & App Activity

If Web & App Activity is turned on, your searches and activity from other Google services are saved in your Google Account, so you may get more personalized experiences, like faster searches and more helpful app and content recommendations.

You can turn Web & App Activity off or delete past activity at any time.

Note: If you got your Google Account through work or school, you might need to contact your administrator to turn on the Web & App Activity additional service for your organization.

What's saved as Web & App Activity

Info about your searches and other activity on Google sites, apps, and services

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Maps and Play
- Your location, language, IP address, referrer, and whether you use a browser or an app
- Ads you click, or things you buy on an advertiser's site
- Information on your device like recent apps or contact names you searched for

Note: Activity could be saved even when you're offline.

Info about your browsing and other activity on sites, apps, and devices that use Google services

When Web & App Activity is on, you can include additional activity like:

- Sites and apps that partner with Google to show ads
- Sites and apps that use Google services, including data that apps share with Google
- Your Chrome browsing history
- Android usage & diagnostics, like battery level and system errors

To let Google save this information:

- Web & App Activity must be on.
- The box next to "Include Chrome history and activity from sites, apps, and devices that use Google services" must be checked.

Your Chrome history is saved only if you're signed in to your Google Account and have Chrome Sync turned on. Learn about Chrome Sync.

Note: If you use a shared device or sign in with more than one account, activity might be saved to the default Aaccount on the browser or device you use.

Audio recordings

When Web & App Activity is on, you can include audio recordings from your interactions with Google Search, Assistant, and Maps as part of your activity. Learn about audio recordings.

To let Google save this information:

- Web & App Activity must be on.
- The box next to "Include audio recordings" must be checked.

How your saved activity is used

Learn more about how Google uses your saved activity and helps keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ.

How Web & App Activity works when you're signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately. Learn how.

Browser history

In the Activity controls page, you can also check the box to "Include Chrome history and activity from sites, apps, and devices that use Google services." When this box is checked, you can control whether activity from your device is saved.

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari, Internet Explorer, or Firefox.

PRODBEG: GOOG-RDGZ-00000225
PRODEND: GOOG-RDGZ-00000225
PRODBEGATT:
PRODENDATT:
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CONFIDENTIALITY:
PRODVOL:
REDACTED:
MD5 HASH:

PRODBEG: GOOG-RDGZ-00000225
PRODEND: GOOG-RDGZ-00000225
PRODBEGATT:
PRODENDATT:
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ATTACH:
NUMATTACH:
CUSTODIAN/SOURCE:
ALLCUSTODIANS:
DOCTYPE:
DOC TYPE:
FILENAME:
DOCEXT:
PAGES: 1
FILE SIZE:
AUTHOR:
OWNER:
DATECREATED:
CREATEDTIME:
DateTimeCreated:
DATELASTMOD:
LASTMODTIME:
DateTimeMod:
DOCTITLE:
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY:
REDACTED:
REDACTION TYPE:
PRODVOL:
FILEPATH:
MD5 HASH:

The Wayback Machine - https://web.archive.org/web/20200616051845/https://support.google.com/w…

See & control your Web & App Activity

If Web & App Activity is turned on, your searches and activity from other Google services are saved in your Google Account, so you may get more personalized experiences, like faster searches and more helpful app and content recommendations.

You can turn Web & App Activity off or delete past activity at any time.

Note: If you got your Google Account through work or school, you might need to contact your administrator to turn on the Web & App Activity additional service for your organization.

Android   Computer   iPhone & iPad

Turn Web & App Activity on or off

1. On your Android phone or tablet, open your device's Settings app ❯ **Google** ❯ **Manage your Google Account**.
2. Tap **Data & personalization**.
3. Under "Activity controls," tap **Web & App Activity**.
4. Turn **Web & App Activity** on or off.
5. When **Web & App Activity** is on:
   - You can check the box next to "Include Chrome history and activity from websites and apps that use Google services." When this box is checked, you can control whether app activity from your device is saved. To choose whether app activity from your device is saved, turn **Saves your activity from apps on this device** on or off.
   - You can check the box next to "Include voice and audio recordings."

Note: Some browsers and devices may have more settings that affect how this activity is saved.

See or delete your activity

You can see and delete your Web & App Activity by visiting My Activity   . Learn more about how to delete activity manually or set up automatic deletion.

What's saved as Web & App Activity

Info about your searches and other activity on Google sites, apps, and services

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Maps and Play

- Your location, language, IP address, referrer, and whether you use a browser or an app
- Ads you click, or things you buy on an advertiser's site
- Information on your device like recent apps or contact names you searched for

Note: Activity could be saved even when you're offline.

Info about your browsing and other activity on sites, apps, and devices that use Google services

When Web & App Activity is on, you can include additional activity like:

- Sites and apps that partner with Google to show ads
- Sites and apps that use Google services, including data that apps share with Google
- Your Chrome browsing history
- Android usage & diagnostics, like battery level and system errors

To let Google save this information:

- Web & App Activity must be on.
- The box next to "Include Chrome history and activity from sites, apps, and devices that use Google services" must be checked.

Your Chrome history is saved only if you're signed in to your Google Account and have Chrome Sync turned on. Learn about Chrome Sync.

Note: If you use a shared device or sign in with more than one account, activity might be saved to the default account on the browser or device you use.

Voice and audio recordings

When Web & App Activity is on, you can include voice and audio recordings as part of your activity. Learn about voice and audio recordings.

To let Google save this information:

- Web & App Activity must be on.
- The box next to "Include voice and audio recordings" must be checked.

How your saved activity is used

Learn more about how Google uses your saved activity   and helps keep it private.

For more information about how Google treats search queries generally, see the Privacy Policy FAQ   .

How Web & App Activity works when you're signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately. Learn how.

Browser history

In the Activity controls   page, you can also check the box to "Include Chrome history and activity from sites, apps, and devices that use Google services." When this box is checked, you can control whether activity from your device is saved.

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari   , Internet Explorer   , or Firefox   .

Was this helpful?

Yes   No

Find & control your Web & App Activity

If Web & App Activity is turned on, your searches and activity from other Google services are saved in your Google Account, so you may get more personalized experiences, like faster searches and more helpful app and content recommendations.

You can turn Web & App Activity off or delete past activity at any time.

Note: If you got your Google Account through work or school, you might need to contact your administrator to turn on the Web & App Activity additional service for your organization.

Computer   Android   iPhone & iPad

Turn Web & App Activity on or off

1. On your computer, visit the Activity controls   page. You may be asked to sign in to your Google Account.
2. Turn **Web & App Activity** on or off.
3. When **Web & App Activity** is on:
   - You can check the box next to "Include Chrome history and activity from websites and apps that use Google services."
   - You can check the box next to "Include audio recordings."

Note: Some browsers and devices may have more settings that affect how this activity is saved.

Find or delete your activity

You can find and delete your Web & App Activity by visiting My Activity   . Learn more about how to delete activity manually or set up automatic deletion.

Tip: To add more security, you can require an extra verification step to view your full history on My Activity   .

What's saved as Web & App Activity

Info about your searches and other activity on Google sites, apps, and services

When Web & App Activity is on, Google saves information like:

- Searches and other things you do on Google products and services, like Maps and Play
- Your location, language, IP address, referrer, and whether you use a browser or an app
- Ads you click, or things you buy on an advertiser's site
- Information on your device like recent apps or contact names you searched for

Note: Activity could be saved even when you're offline.

Info about your browsing and other activity on sites, apps, and devices that use Google services

When Web & App Activity is on, you can include additional activity like:

- Sites and apps that partner with Google to show ads
- Sites and apps that use Google services, including data that apps share with Google
- Your Chrome browsing history
- Android usage & diagnostics, like battery level and system errors

PX-117.0001 of 0002

To let Google save this information:

- Web & App Activity must be on.
- The box next to "Include Chrome history and activity from sites, apps, and devices that use Google services" must be checked.

Your Chrome history is saved only if you're signed in to your Google Account and have Chrome Sync turned on. Learn about Chrome Sync.

Note: If you use a shared device or sign in with more than one account, activity might be saved to the default account on the browser or device you use.

Audio recordings

When Web & App Activity is on, you can include audio recordings from your interactions with Google Search, Assistant, and Maps as part of your activity. Learn about audio recordings.

To let Google save this information:

- Web & App Activity must be on.
- The box next to "Include audio recordings" must be checked.

How your saved activity is used

Learn more about how Google uses your saved activity   and helps keep it private.

For more information about how Google treats search queries generally, review the Privacy Policy FAQ
.

How Web & App Activity works when you're signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately. Learn how.

Browser history

In the Activity controls   page, you can also check the box to "Include Chrome history and activity from sites, apps, and devices that use Google services." When this box is checked, you can control whether activity from your device is saved.

Your searches and the sites you visit may also be stored in your browser or the Google Toolbar. Learn how to delete your history on Chrome, Toolbar, Safari   , Internet Explorer   , or Firefox   .

Message

From: David Monsees [davidmonsees@google.com]
Sent: 7/25/2019 3:42:10 PM
To: Chris Ruemmler [ruemmler@google.com]; Nick Linkow [nicklinkow@google.com]
Subject: Re: Wording changes for WAA bit

Hi Chris,

Thanks for the thoughts!

+Nick Linkow and I have discussed rewrites of all the UDC help center articles (including WAA/sWAA) to create a more consistent structure to explain the kind of "if it's on" vs. "if it's off" points you bring up. Right now, my focus in on the actual consent language (what you see on myaccount.google.com/activitycontrols when you turn on or pause a setting), but we'll want those changes to flow down into the HC.

Other comments in line...

On Wed, Jul 24, 2019 at 4:25 PM Chris Ruemmler <ruemmler@google.com> wrote:
  David,

  Bryan Horling said that you are the one responsible for determining how to change the wording at:

  https://support.google.com/websearch/answer/54068?co=GENIE.Platform%3DDesktop&hl=en

  to properly reflect how Google handles the user's "Web and App Activity" when the WAA bit is disabled and enabled. The above text actually doesn't describe what happens when the bit is disabled. However, given the way on/off works, one has to then assume that disabled (off) would be the exact opposite of what is described for what happens when the WAA bit is on. Today, we don't accurately describe what happens when WAA is off. For instance, we state the following for the "on" state:

      When Web & App Activity is on, Google saves information like:
  o   Searches and other things you do on Google products and services, like Maps
  o   Your location, language, IP address, referrer, and whether you use a browser or an app
  o   Ads you click, or things you buy on an advertiser's site
  o   Information on your device like recent apps or contact names you searched for
      Note: Activity could be saved even when you're offline.
  So, when Web & App Activity is OFF, I'd expect the opposite to happen. The opposite of the above is:
      When Web & App Activity is off, Google does not save information like:
  o
  ▪

  Searches and other things you do on Google products and services, like Maps
  o   Your location, language, IP address, referrer, and whether you use a browser or an app
  o   Ads you click, or things you buy on an advertiser's site
  o   Information on your device like recent apps or contact names you searched for
      Note: Activity will not be saved even when you're offline.
  Critical to note is that WAA (and other UDC settings) control saving of activity to your Google Account (as they are account settings) for the primary purpose of a more personalized experience across Google services.

That scope is defined in the UDC consent flows and at the very top of the help center article, "If Web & App Activity is turned on, your searches and activity from other Google services are saved in your Google Account, so you may get more personalized experiences".

Per the privacy policy and retention article, data may be processed for other purposes, like spam, product improvement, etc.

But that is not what is done either today or what is proposed going forward (GAIA temp logs). The line "Ads you click, or things you buy on an advertiser's site" we probably don't want to lose ever as that is how we charge for Ads :). If everyone turned off WAA, then we would not know who clicked on Ads which would bad. So, obviously, the opposite of on is not really the way it should work.

We later state:

How Web & App Activity works when you're signed out

Your search and ad results may be customized using search-related activity even if you're signed out. To turn off this kind of search customization, you can search and browse privately. Learn how.

Which is a little odd as this seems like more data being collected than with signed-in WAA off (based again on what we have written in the description of WAA on this page).

By some interpretations, that is correct. With the move to temp personal logs, WAA off will retain less data that signed out; however, signed out is and was never associated with an identity, so the risk balance is different.

So, it appears we have a real problem here with accurately describing what happens when WAA is disabled. We should fix the current wording to reflect reality and if we make the change to temp GAIA logging, then we need to be very clear about what data is collected with WAA off.

The temp GAIA logging solution also does not feel good to me as we are giving the user no way exclude logging of their search activity. It seems like the best solution is to de-identify (as we do today), but not keep that data forever (eliminate it at 30 days) when WAA is off (or for signed-out users). We still would need to modify the help article above to indicate that WAA off is identical to being not logged into your account (data logged, but not tied to your account). The temp GAIA logging solution would be wide open for legal search given it is tied to the user's GAIA ID, so that is a bad solution for someone that does not want Google recording their activity.

Today (in Search, Maps, Assistant, etc.) WAA off is logged the same as being signed out. What the WAA off temp personal logs project will do is change that behavior to be aligned with what YouTube, Play, Apps, and many other teams have done for years with gaia temp logs -- instead of creating a pseudonymous archival log, we will create a temporary (30-60 day, Sawmill deletion window) limited purpose log. A lot more detail is in here: go/change-waa-master-prd
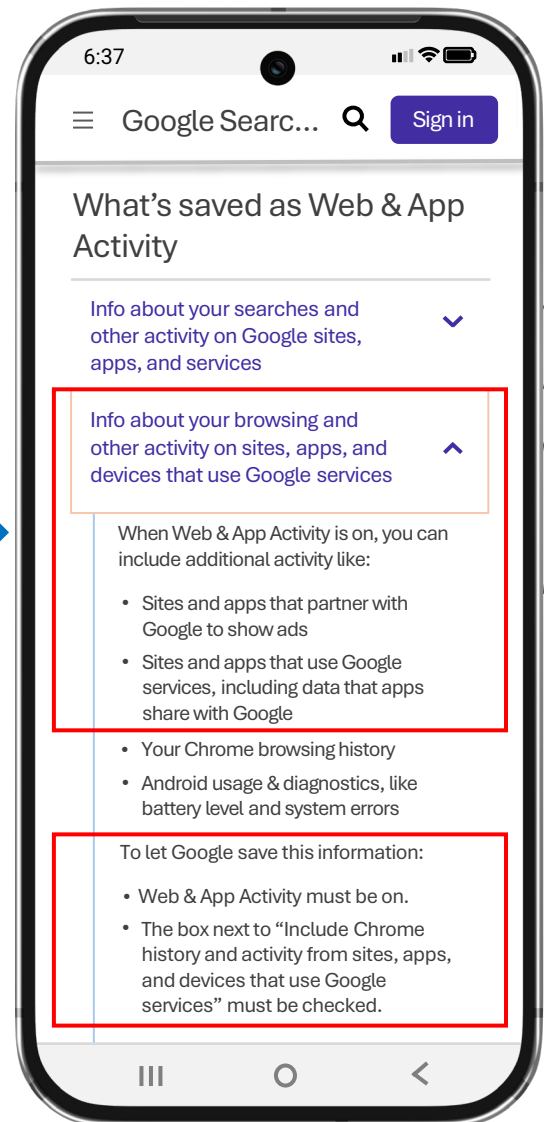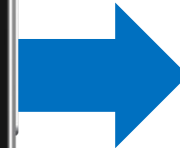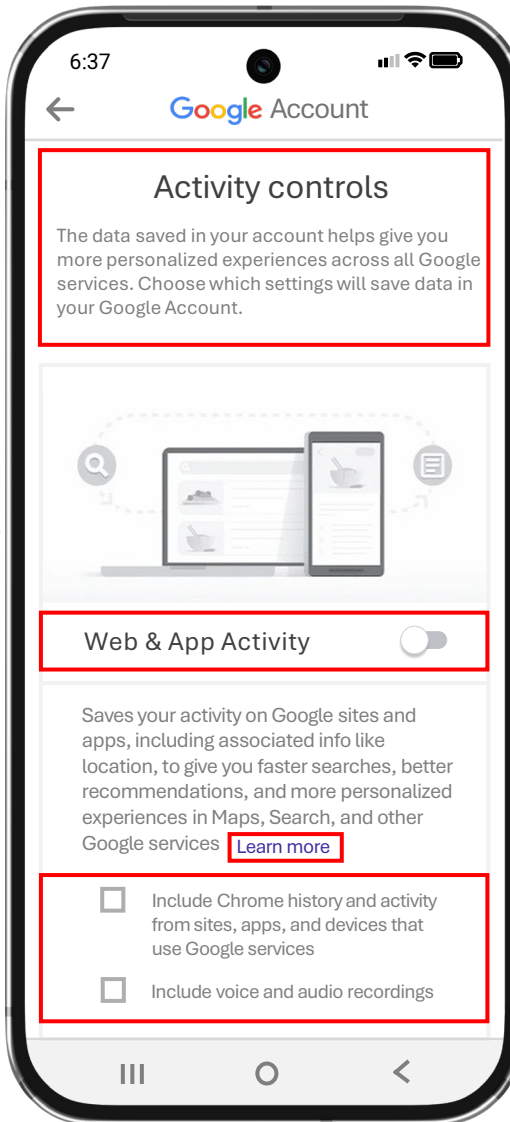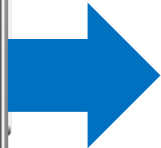
--Chris
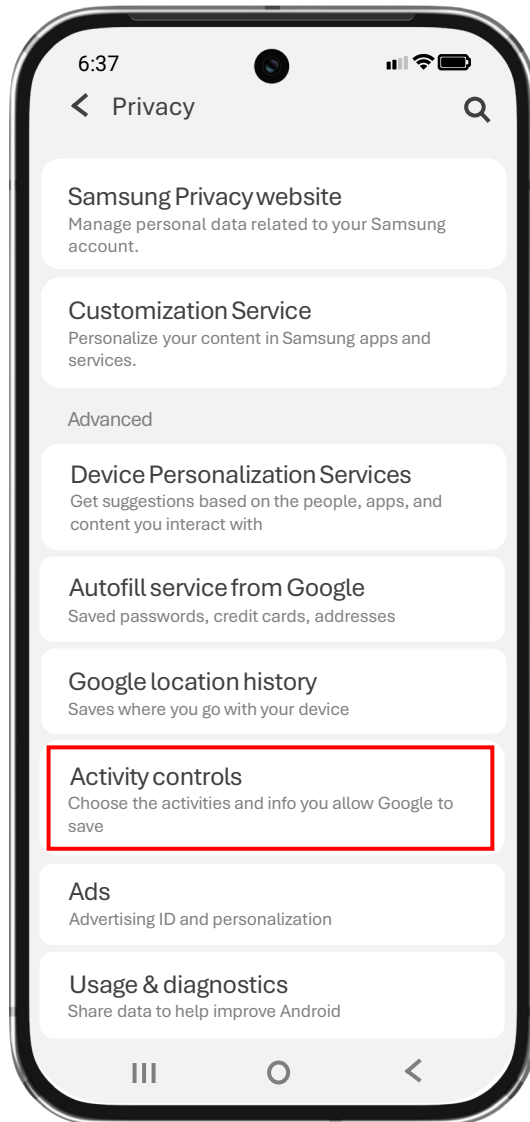

--
Google Inc., product mgmt.
mail: davidmonsees@google.com
visit: 1600 Amphitheater Parkway, Mountain View, CA 94043
call: 443.610.4008

Screen 1 — Privacy

6:37

‹ Privacy 🔍

Samsung Privacy website
Manage personal data related to your Samsung account.

Customization Service
Personalize your content in Samsung apps and services.

Advanced

Device Personalization Services
Get suggestions based on the people, apps, and content you interact with

Autofill service from Google
Saved passwords, credit cards, addresses

Google location history
Saves where you go with your device

Activity controls
Choose the activities and info you allow Google to save

Ads
Advertising ID and personalization

Usage & diagnostics
Share data to help improve Android

Screen 2 — Google Account

6:37

← Google Account

Activity controls

The data saved in your account helps give you more personalized experiences across all Google services. Choose which settings will save data in your Google Account.

Web & App Activity

Saves your activity on Google sites and apps, including associated info like location, to give you faster searches, better recommendations, and more personalized experiences in Maps, Search, and other Google services. Learn more

☐ Include Chrome history and activity from sites, apps, and devices that use Google services

☐ Include voice and audio recordings

Screen 3 — Google Search

6:37

☰ Google Searc... 🔍 Sign in

What's saved as Web & App Activity

Info about your searches and other activity on Google sites, apps, and services ⌄

Info about your browsing and other activity on sites, apps, and devices that use Google services ⌃

When Web & App Activity is on, you can include additional activity like:

• Sites and apps that partner with Google to show ads

• Sites and apps that use Google services, including data that apps share with Google

• Your Chrome browsing history

• Android usage & diagnostics, like battery level and system errors

To let Google save this information:

• Web & App Activity must be on.

• The box next to "Include Chrome history and activity from sites, apps, and devices that use Google services" must be checked.

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The Wayback Machine - https://web.archive.org/web/20180703220610/https://policies.google.com/technologies/par…

HOW GOOGLE USES INFORMATION FROM SITES OR APPS THAT USE OUR SERVICES

Many websites and apps use Google services to improve their content and keep it free. When they integrate our services, these sites and apps share information with Google.

For example, when you visit a website that uses advertising services like AdSense, including analytics tools like Google Analytics, or embeds video content from YouTube, your web browser automatically sends certain information to Google. This includes the URL of the page you're visiting and your IP address. We may also set cookies on your browser or read cookies that are already there. Apps that use Google advertising services also share information with Google, such as the name of the app and a unique identifier for advertising.

Google uses the information shared by sites and apps to deliver our services, maintain and improve them, develop new services, measure the effectiveness of advertising, protect against fraud and abuse, and personalize content and ads you see on Google and on our partners' sites and apps. See our Privacy Policy to learn more about how we process data for each of these purposes and our Advertising page for more about Google ads, how your information is used in the context of advertising, and how long Google stores this information.

Ad personalization

If ad personalization is turned on, Google will use your information to make your ads more useful for you. For example, a website that sells mountain bikes might use Google's ad services. After you visit that site, you could see an ad for mountain bikes on a different site that shows ads served by Google.

If ad personalization is off, Google will not collect or use your information to create an ad profile or personalize the ads Google shows to you. You will still see ads, but they may not be as useful. Ads may still be based on the topic of the website or app you're looking at, your current search terms, or on your general location, but not on your

interests, search history, or browsing history. Your information can still be used for the other purposes mentioned above, such as to measure the effectiveness of advertising and protect against fraud and abuse.

When you interact with a website or app that uses Google services, you may be asked to choose whether you want to see personalized ads from ad providers, including Google. Regardless of your choice, Google will not personalize the ads you see if your ad personalization setting is off or your account is ineligible for personalized ads.

You can see and control what information we use to show you ads by visiting your ad settings.

How you can control the information collected by Google on these sites and apps

Here are some of the ways you can control the information that is shared by your device when you visit or interact with sites and apps that use Google services:

- Ad Settings helps you control ads you see on Google services (such as Google Search or YouTube), or on non-Google websites and apps that use Google ad services. You can also learn how ads are personalized, opt out of ad personalization, and block specific advertisers.

- If you are signed in to your Google Account, and depending on your Account settings, My Activity allows you to review and control data that's created when you use Google services, including the information we collect from the sites and apps you have visited. You can browse by date and by topic, and delete part or all of your activity.

- Many websites and apps use Google Analytics to understand how visitors engage with their sites or apps. If you don't want Analytics to be used in your browser, you can install the Google Analytics browser add-on. Learn more about Google Analytics and privacy.

- Incognito mode in Chrome allows you to browse the web without recording webpages and files in your browser or Account history (unless you choose to sign in). Cookies are deleted after you've closed all of your incognito windows

and tabs, and your bookmarks and settings are stored until you delete them. Learn more about cookies.

- Many browsers, including Chrome, allow you to block third-party cookies. You can also clear any existing cookies from within your browser. Learn more about managing cookies in Chrome.

Firebase +
Firebase Analytics ACM

2017 Strategy and Commercialization

12/16/16

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Agenda

- **Firebase update**
  - ○ Adoption metrics
  - ○ Product status
  - ○ 2017 roadmap

- **Firebase Analytics deep dive**
  - ○ Adoption metrics
  - ○ Product status
  - ○ 2017 roadmap

- **Commercialization Strategy (buy-side focus)**
  - ○ Commercialization status
  - ○ 2017 commercialization strategy

Exec Summary

Firebase

- Strong developer interest and growth since launching in May-2016 (176K apps, with 21% of Top 1K on Android, 7% on iOS)
- Adoption weighted mostly towards Torso / Tail developers, while Head devs expect more advanced features vs competition
- 2017 priorities: (1) Strengthen and Grow existing products, (2) integration with Cloud platform, (3) integration with GA360

Firebase Analytics

- 2016 has been a big year: ~9 months to full launch at I/O – with several follow-on launches
- Product adoption has been strong; generally in line with goals but we face headwinds with head customers
- 2017 we plan to continue our platform investments while emphasizing head-centric advertiser features and the in-progress AdMob integration
- Plans are not without risk; resources are tight and the space is increasing in complexity

2017 GTM strategy for advertisers

- Firebase Analytics SDK adoption strong amongst advertisers (~20% SDK adoption by app promo revenue), ~5% advertisers (mostly non-3P) using for conversion tracking, at par with AWCT SDK
- Challenges in taking firebase platform at scale or switching advertisers to FA from current 3P solution
- Plan for 1H/17: Continue to focus activation of non-3P segment ; work on product to make it ready for scaled adoption and competition with 3P tracking providers in 2H/2017 and 2018.

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Firebase Recap

GOOG-RDGZ-00058428
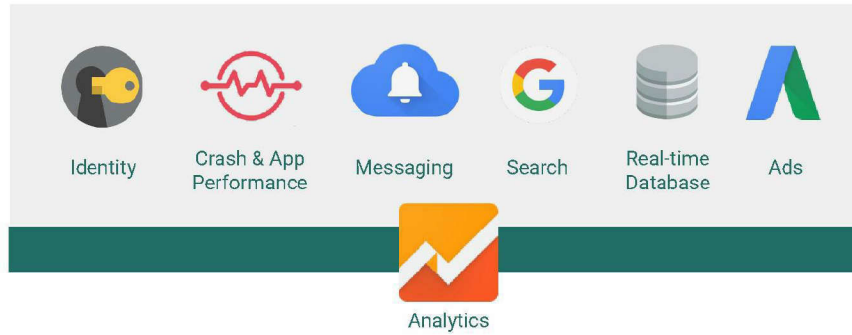
Our Mission

Help developers
build a better app, and a **more successful business**.

Two distinct set of offerings:
Develop -- target to technical decision maker
Grow & Earn -- Business decision maker

Why Firebase?

What's in it for developers and Google?

Help developers build better apps and grow successful businesses
On-ramp and grow developers with Google's businesses (Ads, Cloud, Play, etc)

Help developers be where the users are, with x-platform offerings
Build brand equity and increase our SDK footprint on iOS

Help developers get more out of Google by sharing data
Drive SDK adoption and capture data to enhance Google products

Help developers adopt and lower entry cost on to Google's platforms
Grow ecosystem for Android, VR, Assistant, etc.

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Progress since I/O 2016 (6 months ago)
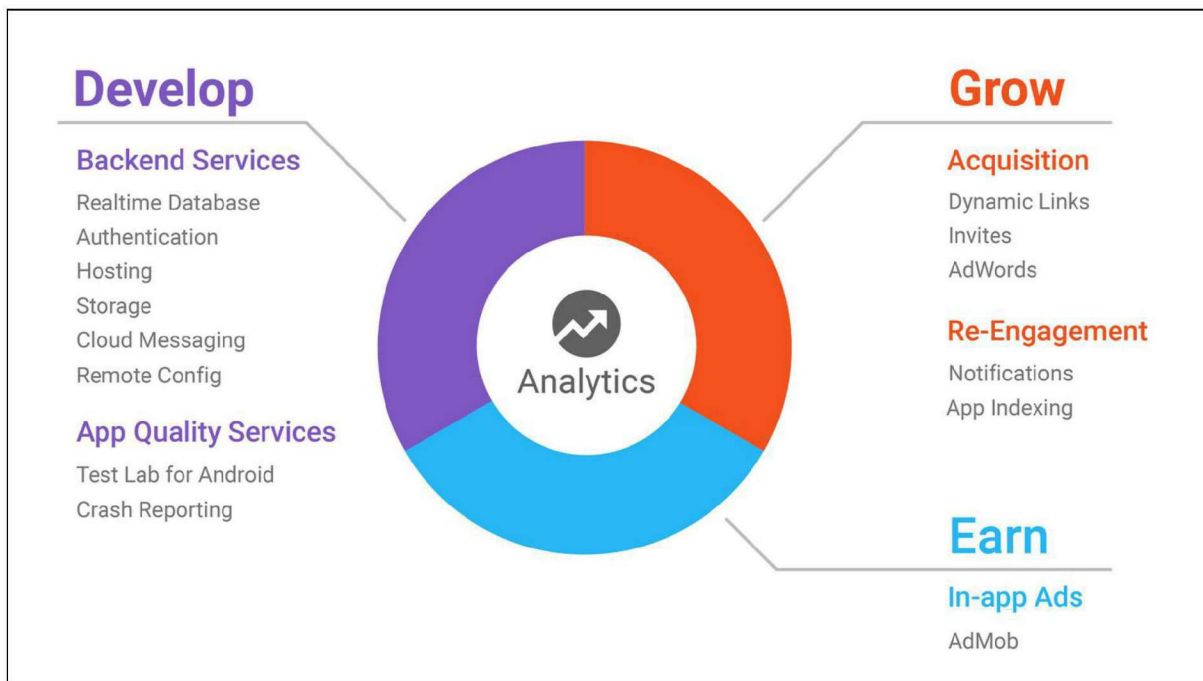
THIS is what Firebase looks like now!
<pause>
Pretty cool, right!
All while staying true to the guiding principles we've had from the beginning:

7DA Apps:

134k Android
42k iOS

Top 1K adoption:

206 Android
71 iOS

Total 7DA Apps

Total 7DA Apps within the Top-1K-Installed Apps

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GOOG-RDGZ-00058433
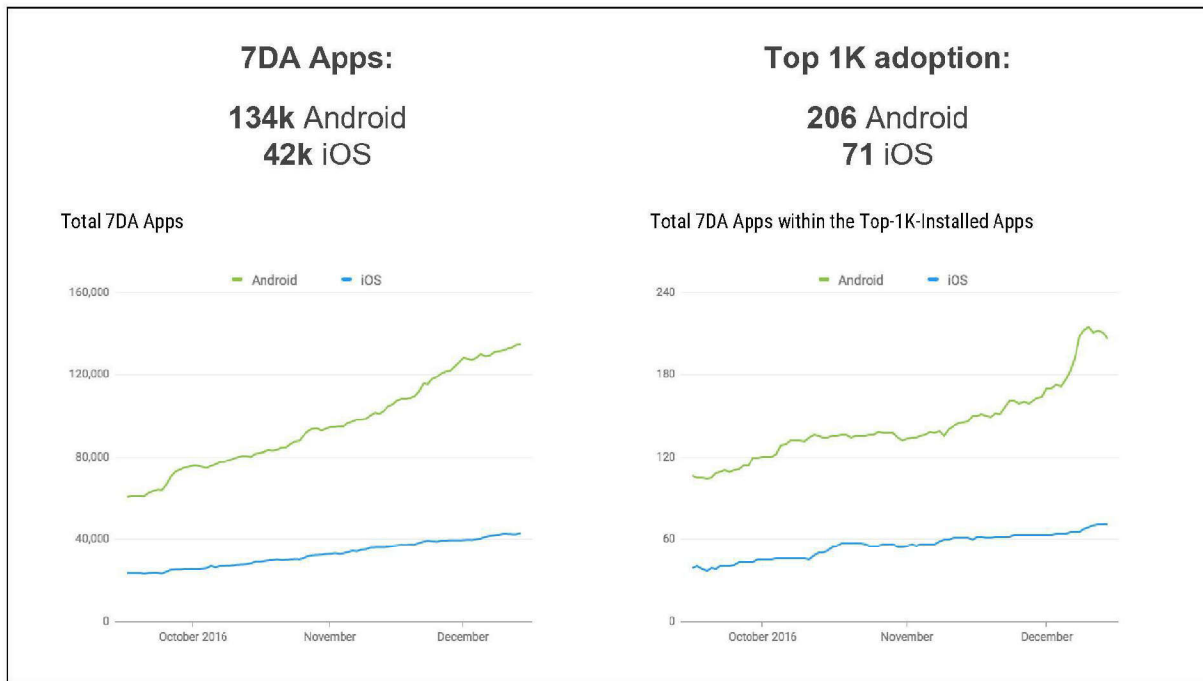
Top APIs:
Analytics, Database, FCM

Avg APIs integrated:
1.7

28DA Projects by Feature
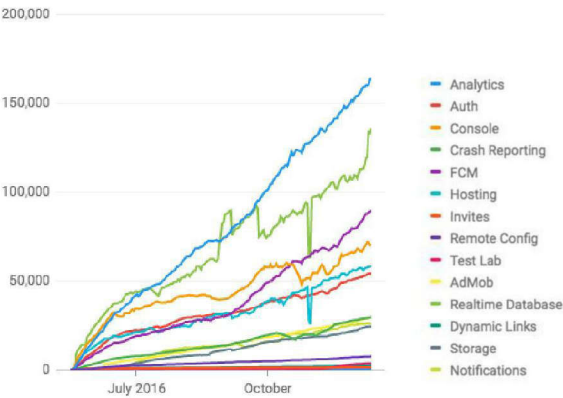
Number of Features Used by 7DA Projects

GOOG-RDGZ-00058434
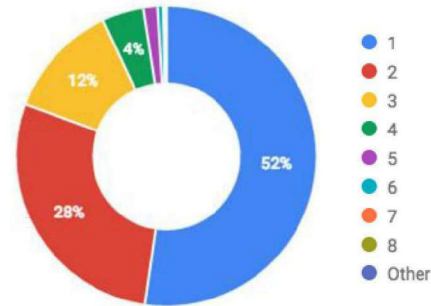
Product status

	Head	Torso	Tail	Gaps
Backend Services		Realtime Database Storage Authentication Hosting Cloud Messaging Functions (in development) Firestore (in development)		. BaaS attractive to new developers for ease-of-use . Scaling today via DevRel . GCP integration (eg. Functions) will help bridge gap with Head / Enterprise
App Quality		Crash Reporting Test Lab		. Still early (exited Beta in Nov) . Test Lab is Android only
Growth Services		Remote Config Notifications Dynamic Links App Indexing		. Many strong competitive pointed solutions . Meets needs for Torso / Tails, but Heads are looking for more features
Analytics		Behavioral Analytics X-Network Attribution		

By app store ranking
Head: top 200
Torso: 200 - 2000
Torso: rest

Investment in future head

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GOOG-RDGZ-00058435

Current GTM Strategy

	Head	Torso	Tail
Backend Services			
App Quality		**DevRel** Scaled outreach to Torso / Tail	
Growth	**GPP + Dev Partners** Top 200 partners		
Analytics	**GSL + Sales** Analytics pitch to advertisers & publishers **gTech** Analytics support		

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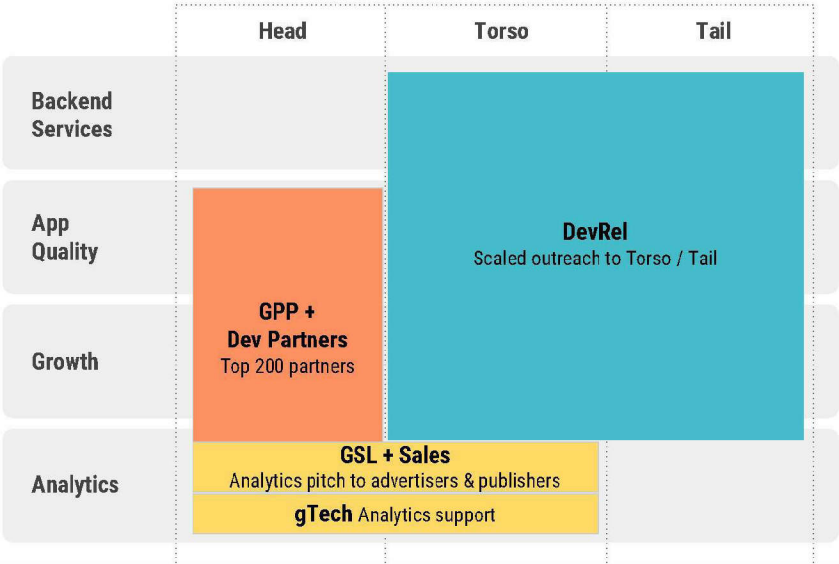
Partnerships status

Highlights:

1. "Platform vision" works well - partners hungry for Google's thought leadership + reliability

2. Devs make decisions at the feature-level to solve a specific need, then snowballs

3. FA as a "tactic" for Cloud works for large co's to get data into BigQuery

Lowlights:

1. Ramping up on Cloud commercialization and contracts. (AMEX, Ebay, Fitbit, Soundcloud)

2. Safari View Controller impacted speed to scale **Dynamic Links** (Pinterest)

3. Sophisticated devs seeking advanced abilities. Ex: **Notifications** too basic, but **high interest** in future **machine learning** plans, **Dynamic audiences,** etc

Showcase implementations:

- Jet.com - Crash Reporting
- NYTimes - Remote Config
- Alibaba - FCM
- Shazam - Dynamic Links
- AMEX - Test Lab

Jet.com on Crash Reporting:
"Firebase Crash Reporting was seamless to integrate and its tracking and clustering has allowed us to closely monitor performance on a constant basis. The ability to parse that data in the Google Cloud Platform has been a huge win for us."

What's ahead?
2017

2017 OKRs

O: Increase Adoption and Developer Satisfaction of Firebase

KR: Grow Firebase usage 5x, to **1M** 28DA integrated projects and **1B** 1DA app instances

KR: Increase Product Excellence and Google's brand equity with **>90%** Product & Support CSAT

KR: Grow revenue base 10x, to **100K** billing-enabled projects

KR: **>2** features actively used per 28DA project

GOOG-RDGZ-00058439

2017 Roadmap: Themes & Highlights

1. **Strengthen and Grow our existing offerings**
   - "Catch up" features + polish

2. **Extend Backend services to be the mobile suite for GCP**
   - Firestore
   - Functions

3. **Extend App Quality services, and deepen integration with Play**
   - Performance reporting

4. **Extend Growth offerings, including integration with GA360**
   - Notification + Remote Config A/B testing (integration with Optimize)
   - In-app notifications
   - Predictive analytics (Churn + Spend prediction)

PX-163.0017 of 0040
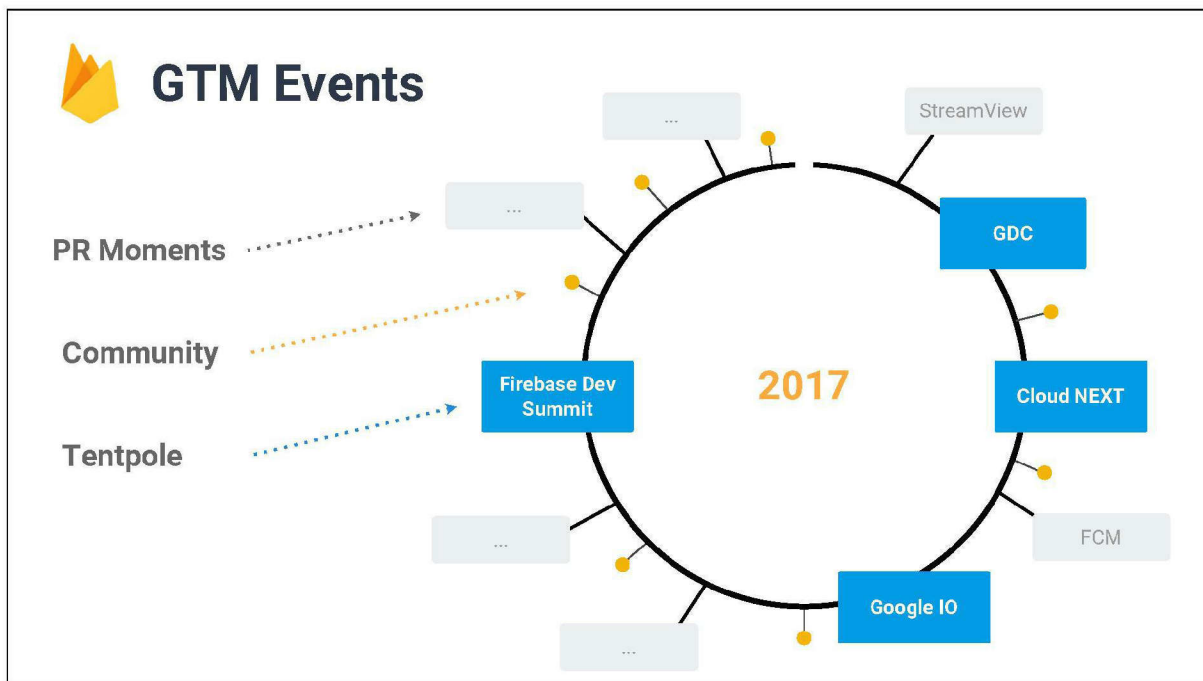
Our strategy is to mix multiple types of moment.
Regular drum beat feature launches to show momentum, firebase front of mind
Documentation, samples, video outreach, blog posts and work with online communities to educate and advocate
Regional events to increase global awareness and build community, spread word about the platform as it evolves
Major tentpole events to amplify sets of launches & features through focusing PR, marketing and product.

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GOOG-RDGZ-00058441

Firebase Analytics Deep Dive

Positioning (reminder)

Value to Google
- Automatic source of structured in-app event data
- Alternative solution to 3p trackers
- Unifying layer of Firebase platform & Google products

Market positioning
- Free & Unlimited behavioral analytics product
- Cross-network attribution solution
- Tightly integrated with Firebase and Google Products

Target customers
1. Advertisers (users of AdWords)
2. Publishers (users of AdMob)
3. Marketer (users of Google Analytics/GA360)
4. Developers (users of Firebase/Cloud/Play)
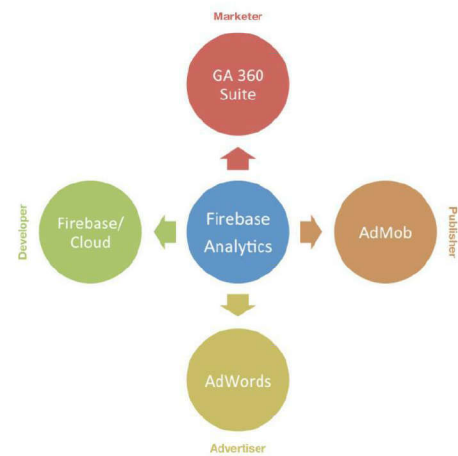
go/firebaseanalytics-charter

GOOG-RDGZ-00058443

Product status - Key Metrics

- **202K** total apps sending Firebase Analytics data (2016 OKR of 200K) (source: go/scion-dash)

- **~20%** of AdWords App Install spend using Firebase for any reason and sharing Firebase Analytics data with Google (2016 product OKR of 30%) (source: go/fa-ads-dashboard)

- **~5%** of AdWords App Install spend using Firebase Analytics conversion tracking (source: go/fa-ads-dashboard) (2016 OKR of 10%)

- **206** of top 1K Android apps, **71** of top 1K iOS apps (2016 OKR of 300 on each) (source: go/firebase-dashboard)
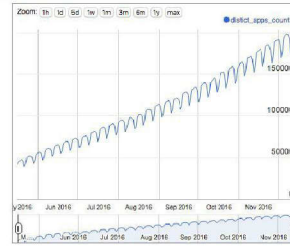
202,195 1DA Apps
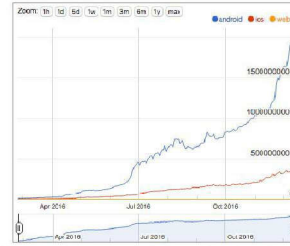
24B Total Events (21B Android, 3.6B iOS)

Releases since I/O

Public
Launch
@ I/O

May   June   July   Aug   Sept   Oct   Nov

- Realtime Rmktg

Buyside Features:
- Dynamic Links
- Play Referrer
- Facebook Deep Linking

- User property targeting in Remote Config
- Event trace in Crash
- AdMob metrics infrastructure
- DebugView (WL)
- StreamView (WL)
- Screen Tracking
- Data Studio Templates
- 1P Reporting API

Google

Confidential + Proprietary

Talking points
Firebase is a comprehensive platform, with offerings across Develop, Engage and Earn

2017 Product Roadmap

GOOG-RDGZ-00058446

Framing

- 2016 Focus:
  - Build MVP product
  - Drive platform growth, broad SDK adoption and data collection
  - Results:
    - We're seeing good adoption generally in line with our goals
    - Product is strong with tail and torso additional investment needed for head customers
    - We're only 6 months from launch so we're still early

- 2017 Focus:
  - Continue driving platform growth, broad SDK adoption and data collection
  - Build out head-centric advertising/attribution features in H1 2017
    - Pave the way for expanded commercialization in H2
  - Emphasize publisher features currently in development

GOOG-RDGZ-00058447

2017 Roadmap by Customer

Advertiser

- DoubleClick Integration
- Endpoint for conversions (non-SDK)
- Configurable Attribution Windows
- View-through conversions
- Data Driven Attribution (H2)

Marketer

- Cross-device in GA
- Reporting API
- Narnia 2.0 Gaia-based reporting

Developer

- A/B Testing w/ Optimize
- Param Reporting
- A-B Audiences
- StreamView (realtime)

Publisher

- AdMob - Publisher reporting
- DFP Audience support

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Risks / Opportunity

- Resources are tight; we're doing the best with what we have
  - ENG/PM: Analytics is the nexus for cross-product integrations putting feature development in one area in tension with another
  - Support/BD/DevRel: When we "sell the platform" it works but current support/BD/DevRel resources limit this pitch to strategic customers only

- This is a complex space; Facebook and others are moving fast
  - Supporting this system at scale remains critical
  - Head and Hybrid customers introduce an expanded set of needs
  - The definition of "Apps" (and Firebase) is constantly expanding (PWAs, Instant, Assistant, etc.)
  - Need to refine branding; Firebase vs. Google Analytics is a challenge

- Opportunity: We've invested in SDK adoption/data collection and are ready to see that value tested

2017 Annual OKRs (to be reviewed)

1. 15% of AW App Revenue tracked by Firebase Analytics
2. 50% of AW App Revenue using Firebase Analytics for any reason
3. 25% of AdMob revenue associated with Firebase linked apps (proposed / shared with Firebase)
4. 1M 28DA integrated projects (shared with Firebase)
5. 1B 1DA app instances sending data (shared with Firebase)

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2017 GTM Strategy

Product Adoption Status (advertisers)

Adoption by advertisers: % of app promo revenue

- FA Importing Conversions % of $
- FA SDK Adopted % of $
- AWCT % of $
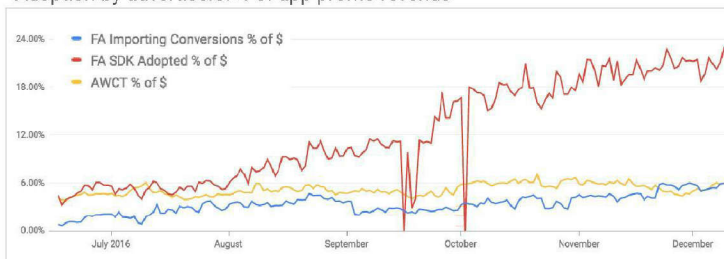
Key client wins:
Wish, Booking.com, Flipp, Elex Tech, NYT, Skyscanner, Avus Capital

- Firebase Analytics SDK adoption strong , **~20% of app promo revenue from apps that have Firebase SDK** (~46% of app promo rev. by division have at least one app using Firebase)
- **Firebase Tracking in AdWords (importing conversions) ~5% of app promo revenue**, now at par with AWCT adoption

Key Learnings so far:
- Firebase Analytics as **conversion tracking solution for non-3P clients works** (limited addressable segment)
- Difficult to switch advertisers from 3P tracking to FA, absence of Facebook tracking is a key inhibitor. 'Free' proposition appeals to long tail.
- Firebase Analytics SDK adoption mainly **driven by Behavioral Analytics/broader Firebase platform** , but requires
  - Firebase experts in the room
  - Pre & Post technical support
  - Long sales cycle

Data as of 12/9/2016. Source: go/fa-ads-dashboard, pulled on 12/13/16

Clients using Firebase tracking in AW:
374 divisions (72 also have a 3P)

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Background for GTM strategy

What is the value for Google ads of scaled Firebase Analytics penetration?
1. In-app data to inform UAC machine learning models
2. Advertisers making media decisions using Google tools

What has changed since Firebase Analytics launch?
Strong investment in integration with 3P tracking providers (AAP program) will address most parts of #1 & #2 above.
→ Creates GTM-tensions:
   - Drive Firebase Analytics adoption with advertisers or new simplified 3P tracking integration?
   - No strong reason to choose FA over 3P
   - Firebase platform pitch most effective but platform not ready for scale + advertisers may not use FA for conversion tracking
→ Reduces the immediate urgency for scaled Firebase Analytics penetration

Plan:
   - Continue to focus activation on non-3P segment (~20% of app promo revenue)
   - Hone-in on product and feature maturity for both Firebase and Firebase Analytics to make it ready for scaled adoption and competition with 3P tracking providers in 2H/2017 and 2018.

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1H2017 GTM plan for advertisers

Sales Activation:
- FA as conversion tracking solution to non 3P advertisers
- Support Migration to FA SDK for :
  - AWCT users when AWCT SDK is deprecated
  - GA free customers who violate hit limits
- Build best practices guide on how to draw insights from FA

Support:
- gTech to support analytics implementation and AdWords linking
- Devrel to provide reactive support via email for Firebase platform
- Ask: Reactive hands on support (Devrel/BD) for Firebase platform for key clients (~30) in H1
- Ask: Sales eng support for scaled adoption of firebase platform in H2 and beyond

Marketing:
- Position FA value prop clearly alongside GA and 3P integrations which are launching in Q1
- Amplify key FA Product Launches such as StreamView Launch at GDC/ MWC, DoubleClick Integrations, AdMob Integration, View-through conversions,
- Drive adoption with a "lifecycle" email program for developers that sign-up for UAC via the developer console

Marketing:
On the Marketing side, a key focus is in ensuring clarity for the different customer segments. So on the behavioral analytics side ensuring that there is clear in market positioning / message of Firebase relative to GA for Apps. And in Attribution, ensuring the same relative to the 3P program we are ramping up to launch and hold them accountable.

We'll continue to drive in market reception, awareness and adoption of new features in key industry moments like Stream View, etc.

And we are working on broader programs like an email program to drive usage of FA Attribution that sign up for UAC through the dev console.

GOOG-RDGZ-00058454

Appendix

Competitive Insights | Overview

What does the competitive landscape look like?
- There is no one market leader with the breadth of Firebase Analytics
- Facebook has most of the pieces but isn't competing on all fronts today

Leaders:

- **Behavioral Analytics**
  - Facebook
  - Mixpanel
- **Enterprise Marketer**
  - Adobe
  - Google Analytics
- **Developer**
  - Answers
  - Developer-centric point solutions
  - Facebook

- **Advertiser**
  - Tune, Kochava, etc.
  - Facebook
- **Publisher**
  - Serviced via the ad networks
  - Manually-tracked events in behavioral analytics

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Competitive Insights | Strengths

What are the key strengths / differentiators?
- Free and unlimited
- Behavioral + Attribution analytics
- Easy to get started and extend
- Customers own their data

What is the Firebase integration story?
- It's the glue :)

What is the Google magic? (what others cannot easily replicate)
- Free and unlimited at scale
- Tight ads and Firebase integrations
- Trusted leader in enterprise-class analytics
- Google Identity Graph
- ML and automation

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Competitive Insights | Weaknesses

What are the weaknesses?
- Web and app analytics are fragmented
- Facebook's identity graph is more readily usable than ours
- The commitment to Free and Unlimited is resource intensive causing us to be less flexible
- Integrations at Google are slow and difficult
- iOS web-to-app remains a blocker due to fingerprinting restrictions

What trade-offs / compromises have contributed to these weaknesses?
- Splitting-out Scion from GA
- Aggregated-only reports and audiences with client-side persistence
- Ads and GAIA systems are separate so we've built lots of work-arounds

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Detailed Roadmap - H1 2017

Feature	Core Analytics	Marketer	Publisher	Advertiser	Developer	Effort Size
StreamView	3					l
AdMob Integration - publisher reporting			3			l
DFP Audience Integration			1	1		s
Improved user metric computations (hyperloglog)	3					s
Screenview reporting - part 1 (user engagement by screen)	1					s
DDM integration				2		
More networks for 3P postbacks				2		s
Firebase Growth: user properties need to be sent to registry in realtime		1				s
Scion Event End Point Part 1: conversion tracking				3		m
3P Reporting API						s
A-B audiences	3	3	3	3	3	l
Server-side state	3					l
Narnia 2.0 GAIA-based reporting	3					l
Data Processing Amendment	3	3			2	s

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Detailed Roadmap - H1 2017 (continued)

Feature	Core Analytics	Marketer	Publisher	Advertiser	Developer	Effort Size
Support Cross Device in GA	3	3	3	3	3	tbd
Configurable attribution window				1		s
View through attribution				3		m
Enhanced ecommerce API		1				s
Fraud / Spam (advertising spam) - general version (sending revised UA and IP address over to BOW)				3		m
Firebase Functions					3	m
Real/closed funnels (possibly client-side)	3					l
Firebase/Optimize A/B Testing Measurement		2			3	m
Custom Param reporting	3					l
Support Firebase Curated Roles Phase 1: Access/No Access				1	2	m
Premium Aggregation Pipeline		3				s
Aggregation optimization						
BigQuery linking option for streaming inserts (to support BQ free storage tier effort)					2	s
Data Driven Attribution (more sophisticated attribution models)				3		l

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Facebook vs Firebase

	Firebase	Facebook
Push notifications	X	X
Unlimited hits	X	X
Create Audiences for remarketing	X	X
True user-centric	O	X
Custom cohorts	O	X
Ad-hoc segmentation	O	X
In-app notifications	O	X
Cross-network attribution	X	O
Developer platform features	X	O
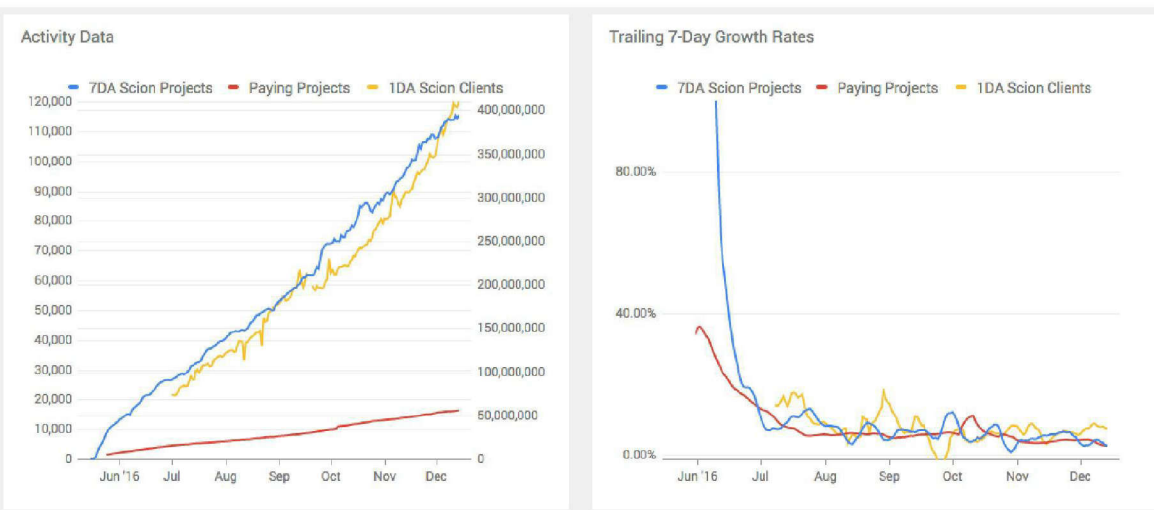
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Firebase Stats / Growth Rates

GOOG-RDGZ-00058462

PRODBEG: GOOG-RDGZ-00058424
PRODEND: GOOG-RDGZ-00058462
PRODBEGATT:
PRODENDATT:
CUSTODIAN/SOURCE: Steve Ganem
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AUTHOR: braendle@google.com
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DATELASTMOD: 08/02/2018
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FROM:
TO:
CC:
BCC:
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PRODBEG: GOOG-RDGZ-00058424
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LASTMODTIME:
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BCC:
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TIMESENT:
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TIMERCVD:
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REDACTED: N
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PRODVOL: PROD019
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MD5 HASH: 878CC7A040EC09F1C15711C1A549E827

Trust & Privacy @ S-20

June 8, 2018 | mholden@, moxley@, mhoffer@, granka@, eberes@, davidmonsees@
(+input/ideas from many others)

go/trust-privacy-s20

PX-184.0001 of 0058
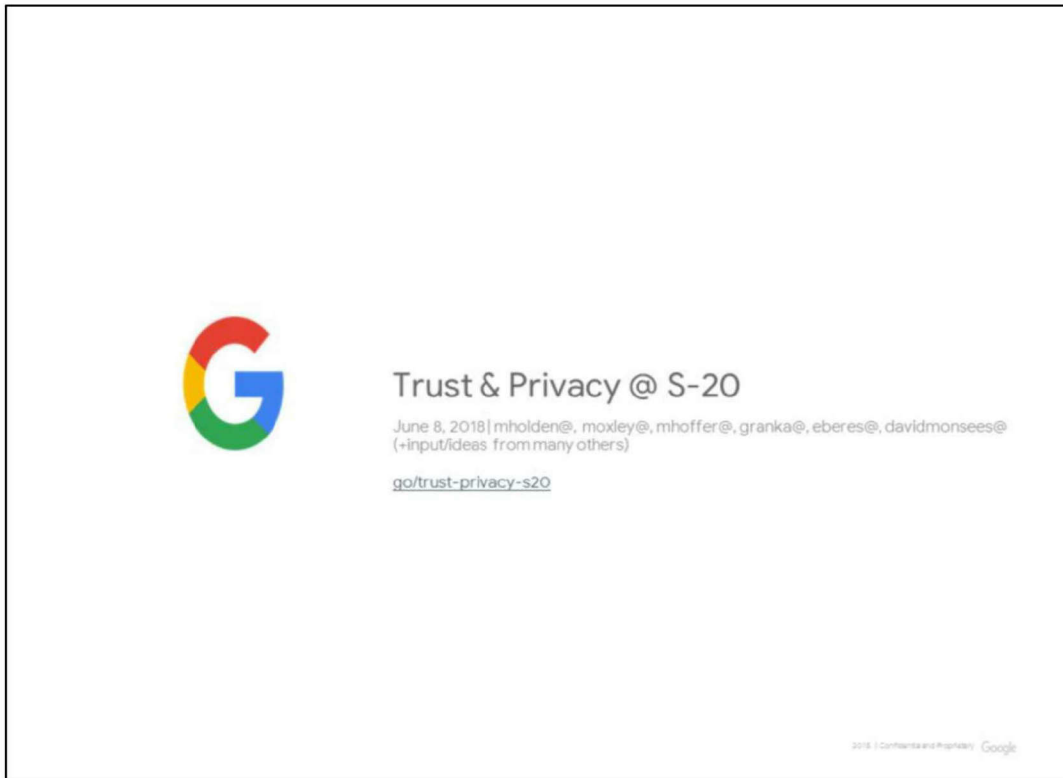
Agenda (6/8)

[5 min]   Audience & goals
[25 min] Discuss a "menu" of possible product announcements

Ask
● Directional guidance from Ben+Nick
● Narrow to 1-3 ideas to explore further for S-20

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Agenda (6/15)

	Theme	Idea	Decision/Status
Last time	Data Privacy	Search Incognito	Yes - Pursue on xGSA (in flight)
	Ranking Transparency	"Why these results?"	Yes - Explore for S-20
		"Explore Ranking" tool	No - High risk (explore for more limited audience)
Today	Data Retention	Shorter Retention	
		Auto-Delete	
	Settings	Simplify WAA	
		Redesign Search Settings	
	Ads	New Ad Settings (v6)	
		Consistent Annotation	
	Data Transparency	User Model Summary	(Not for S-20)

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Sources:
NYTimes (May 2017)
CBS News (May 2018)
WaPo (June 2018)

Goals & Audience (S-20)

Goal
Announce changes at S-20 to strengthen our narrative around trust & privacy.

Scope
Must be announceable in 2-3 months

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Goals & Audience (S-20)

Goal
Announce changes at S-20 to strengthen our narrative around trust & privacy.

Scope
Must be announceable in 2-3 months

Primary Audience
1. Press & influencers
2. Policy makers

Secondary
1. Search users

Ultimately, we want to reach #3 but perception is influenced by #1 and #2.

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Id	Date	Text
1	06/14/2018 20:20:11	I actually think search users are a goal and deserve to be counted along the other audience. There are plenty of individual users out there who, when unhappy with us, say they're using "Duck Duck Go." Some of that starts with press and influencers. But it's also person-to-person when concerns come up about us. It's a tiny audience, yes. But it's an important audience in terms of trust issues we might bring back.
1	06/14/2018 20:20:11	Agree users are a goal (and ultimately who I care about most).
		But wanting to force some prioritization of who our primary audience is for S-20 (consumer press) and ensure we're narrowing scope of any S-20 projects to things we can get done quickly vs other projects we should pursue but not for S-20.
		This ordering is also intended to make clear that our goal is not necessarily to build features that a high % of users use (we normally don't build Search features that only a small % of power users are going to care about). Features that strengthen our narrative around privacy can be a success here, even if only influencers and power users care about them.
		Will change from "Non-Goal" to "Primary/Secondary" to clarify.

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insights

Goals & Audience (S-20)

Goal
Announce changes at S-20 to strengthen our narrative around trust & privacy.

Scope
Must be announceable in 2-3 months

Primary Audience
1. Press & influencers
2. Policy makers

Secondary
1. Search users

Ultimately, we want to reach #3 but perception is influenced by #1 and #2.

Negative audiences
● SEOs
● Competitors

Can exploit announcements to game results or spin negative press.

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Id	Date	Text
1	06/12/2018 17:46:43	+mholden@google.com Maybe not a critical distinction - but maybe worth making the distinction for Audience #1: Tech press and Consumer press. My gut is that they'll come at this issue in slightly different ways.
2	06/12/2018 17:46:43	Good point.

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il. insights

GOOG-RDGZ-00018604

6 Themes (10 Ideas)

Do I trust **Google** (with my data)?

+ **Data Privacy**
+ **Data Retention**
+ **Data Transparency**
+ **Settings**

Do I trust Google's **results**?

+ **Ranking Transparency**
+ **Ads**

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GOOG-RDGZ-00018605

Data Privacy

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Data Privacy

Search Incognito

Problem
- Sometimes users value privacy more than personalization.
- "I don't want every search stored in my history."
- "How do I turn off personalization or see 'neutral' results?"

Idea
- Extend Chrome's "Incognito" metaphor to Search.

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From Danny: Power Google

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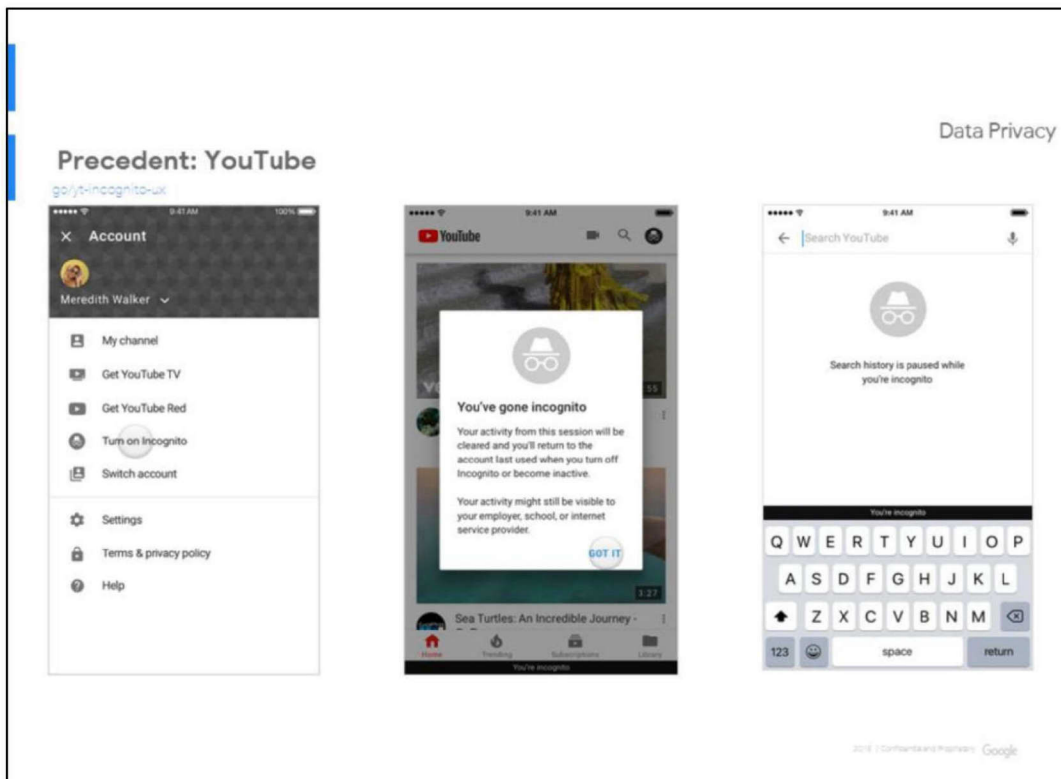
- Apps ignore accounts on the device and treat you like a signed out user.
- Actually signing out on Android only possible by removing account from the phone.
- Not available on web ("Sign out" invalidates session for all products).

Precedent: iGMM

Data Privacy

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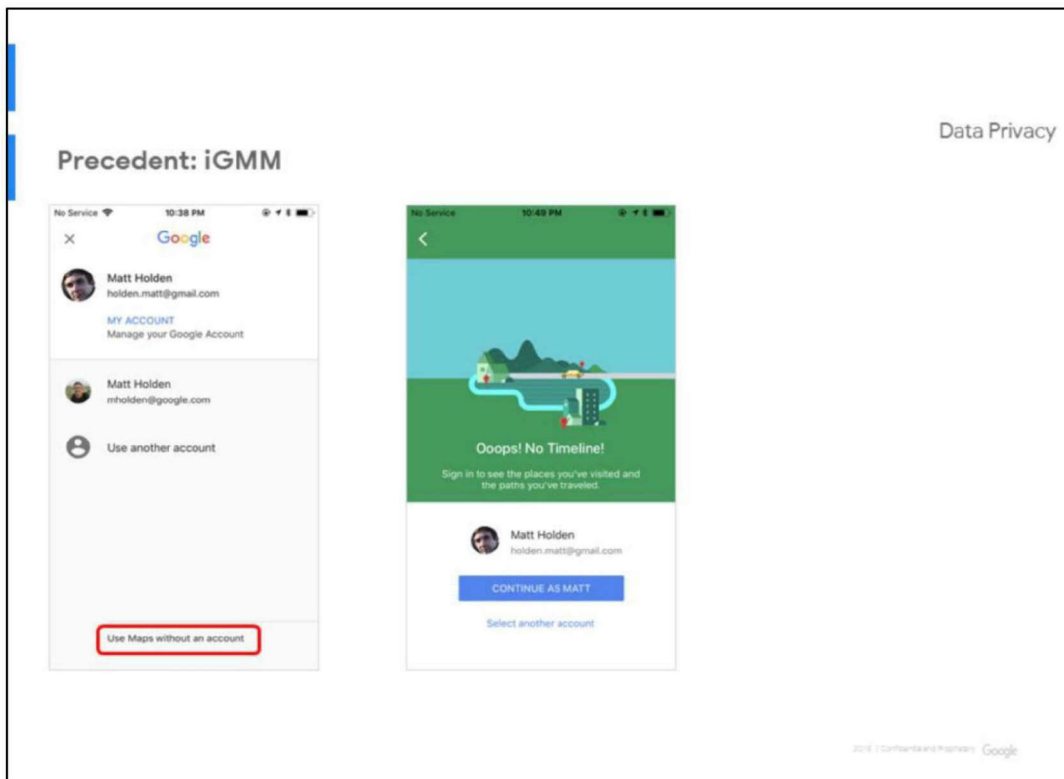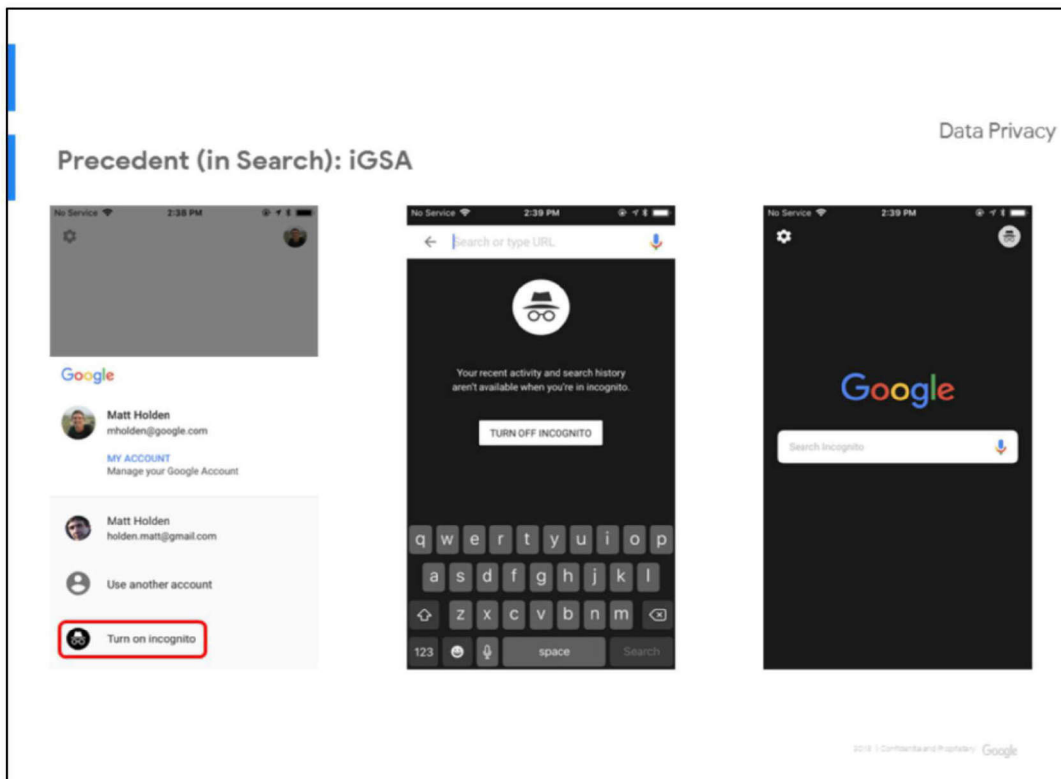
- Doesn't exist for aGSA or web
- OneGoogle UX guidelines here

GOOG-RDGZ-00018610

Data Privacy

Two major constraints on Web (mobile + desktop)

1. Dependent on browsers
   - Cookie/session storage (domain based)
   - No APIs to trigger Incognito/Private browsing
     - ○ (Chrome, Edge, FF, Safari)

2. We can't alter how data collection works outside of Search
   - Any result click can be tracked by 3Ps
   - If 3P is a Google advertiser/publisher, click may be tracked by Google (even if tracking disabled on google.com)
   - Even 1P clicks (Maps, YT) cannot be easily changed to avoid collection

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GOOG-RDGZ-00018611

Id	Date	Text
3	06/12/2018 17:46:27	Thanks. iGSA Incognito doesn't show feed at all. How is Tweed planning to handle logged-out/Incognito on web?
3	06/12/2018 18:01:56	I mean more that going "incognito" on the SRP would NOT prevent us learning about you when you navigate your signed-in browser to yourfavoritesite.com
4	06/12/2018 19:50:29	I see. Yes, my recommendation below is that we not pursue Incognito on web, because there's no viable privacy model. In addition to feed, result clicks could be tracked in other ways via ads even if we disable search history, so we could be violating user expectations in surprising and compromising ways. We're pursuing on mobile, where we have the ability to create a whole new session not tied to your identity at all (similar to how chrome works).
2	06/14/2018 05:00:20	I didn't even realize we had Incognito mode on iGSA! I love this. I especially love it because on the mobile app, you're not going to have more than one "tab" open at once. That's a pain point with Incognito as a solution for desktop. Yes, it works. But it interrupts your other browsing flow. Do you want to launch that for a search if you're really THAT worried about privacy or do you just type in Duck Duck Go? I suspect the latter. So big thumbs-up on adding to aGSA. I have other thoughts on desktop I'll share elsewhere.
1	08/03/2018 13:23:07	Longer term idea, but what if we worked with Chrome/wc3 to add a new web capability to open a new tab in incognito/private mode? eg something like Link
5	08/03/2018 21:43:02	Yeah, I looked into that with Chrome in June. No browsers allow this, by design: "Incognito can't be triggered by a website. This is to avoid joining regular and Incognito sessions/identities. Since we only support one Incognito session at a time, if you have the same website opened once in regular mode and once in Incognito (with two different identities, e.g. signed in and signed out), the website in the regular mode could open itself once again in Incognito, and e.g. pass cookies in the query parameters, joining the two sessions/identities."
2	08/06/2018 18:44:09	+mholden@google.com Also a callout that the Feed won't know how to handle a SRP incognito mode - and that user model is built on queries/result clicks as well as signed in YT, chrome history, etc. _Reassigned to Matt Holden_
2	08/06/2018 18:44:09	Interesting. I didn't know that's how Incognito worked. Too bad, but I now see why this is

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Data Privacy

Option #1: Mobile

Launch "Search Incognito" for aGSA

Benefit
- Reaches much wider audience than before (iGSA only)
- Could be an effective vehicle for privacy demo + narrative
- Already a top-requested feature by users
- Also helpful in NBU, e.g. creating more psychological safety for women

Risk
- Tight schedule to design + ship by Sep
- Could mitigate with on-stage demo and pre-announce

Google

Search Incognito

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GOOG-RDGZ-00018613

GOOG-RDGZ-00018614

Data Privacy

Option #1: Mobile web

Not supported.

Could experiment with using "Incognito" features as a prompt to install GSA.

> **Search Incognito with the Google app**
> Browse privately without saving your activity
>
> NO THANKS   **GET THE APP**

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Data Privacy
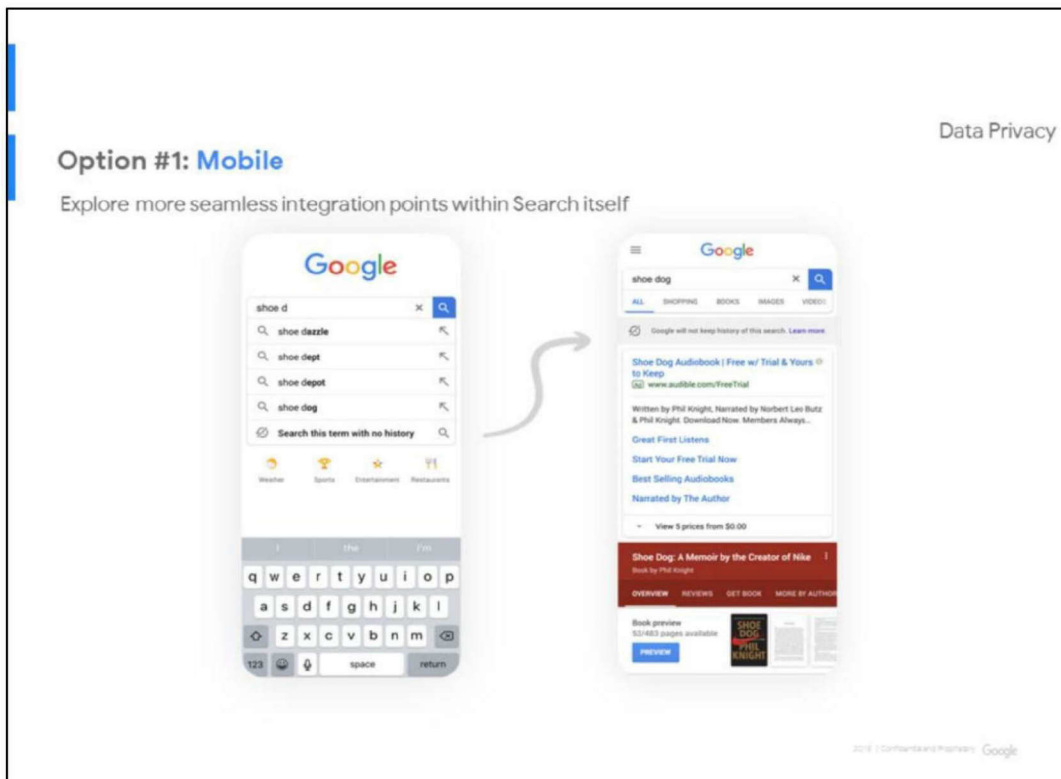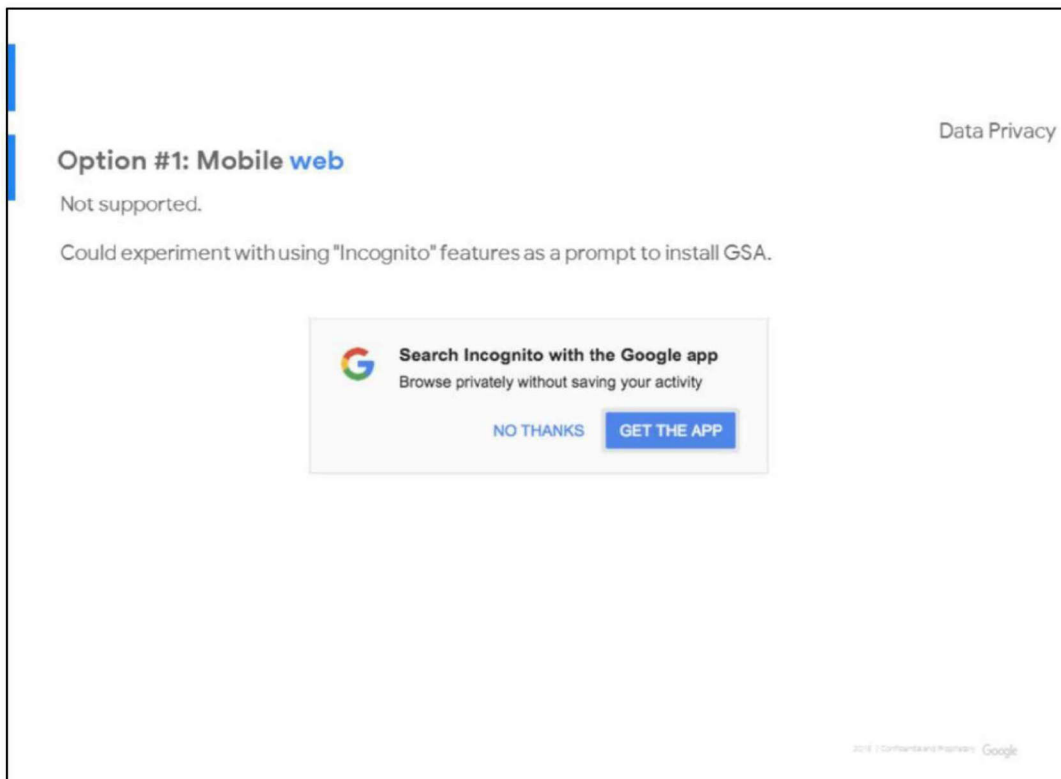
Option #2: Desktop

Launch more limited web-based "Turn off History" feature

Turn off Search history & personalization on google.com (gaia → zwieback)

But need to make clear:
- Your activity can still be tracked when you leave google.com
- By both Google and third-parties

Should not be called "Incognito" -- not consistent with user expectations.

Google

go/incognito-mode

Id	Date	Text
4	06/14/2018 05:15:52	...and it's easier to do this for her, just a click to get to it (Incognito in GSA is at least a two click process, launch the app, switch the mode). A standalone desktop site might help. But overall, I'm totally on-board with aGSA Incognito as the priority. That's because if we can do that, then we can make Incognito a theme -- stress that we have a complete privacy solution from browser to both our apps and reintroduce people who don't even know or remember what Incognito does. Very powerful.
3	06/15/2018 15:05:18	+mholden@google.com If I understand right, we can't do standards-keeping "Incognito" on desktop because it's just too hard to ensure we're not able to deal with all the things that should be blocked. As a suggestion, what about the standalone site idea, incognito.google.com -- where if you go there, no cookie, no tracking, nothing. Is it easier to do if it's a site separate from main search? There are several potential advantages to this: 1) Maybe it's easier to do and more quickly. That's especially so if we position it as a beta and even perhaps only provide web results for a start -- no images, no video, none of that stuff. There 1B) Moreover, we could initially launch it without ads. We could say those will come when we feel we can deal with the blocking properly on them. And if they do come, it might be something that we do in a way where if there are ad concerns, advertisers might choose separately if they want to be there -- a win for them if they want to position themselves also as wanting to be in front of people but in a way that doesn't worry those about tracking. (so few people are likely to use this that I doubt the ad loss initially will be noticeable). 2) It solves the "opening a new tab is a pain" problem in that people can just navigate to this -- or the super-serious might set it as a default, if they want. 3) It solves the mobile web problem (though really, this is kind of solved with launching Incognito as a separate tab) 4) It solves the "I don't want your app" problem. Even if people have Incognito mode in our app, some will still suspect they'll be tracked somehow by the app. OK, if they're that paranoid, they

Data Privacy

Option #2: Desktop

Benefit
- Could replace "I'm Feeling Lucky" button (big splash)

| | Google Search | Search with no History |

(Big) Risk
- Privacy model offers very limited protection, and could violate user expectations/trust
- Invites more scrutiny of how data collection works across Google and the web
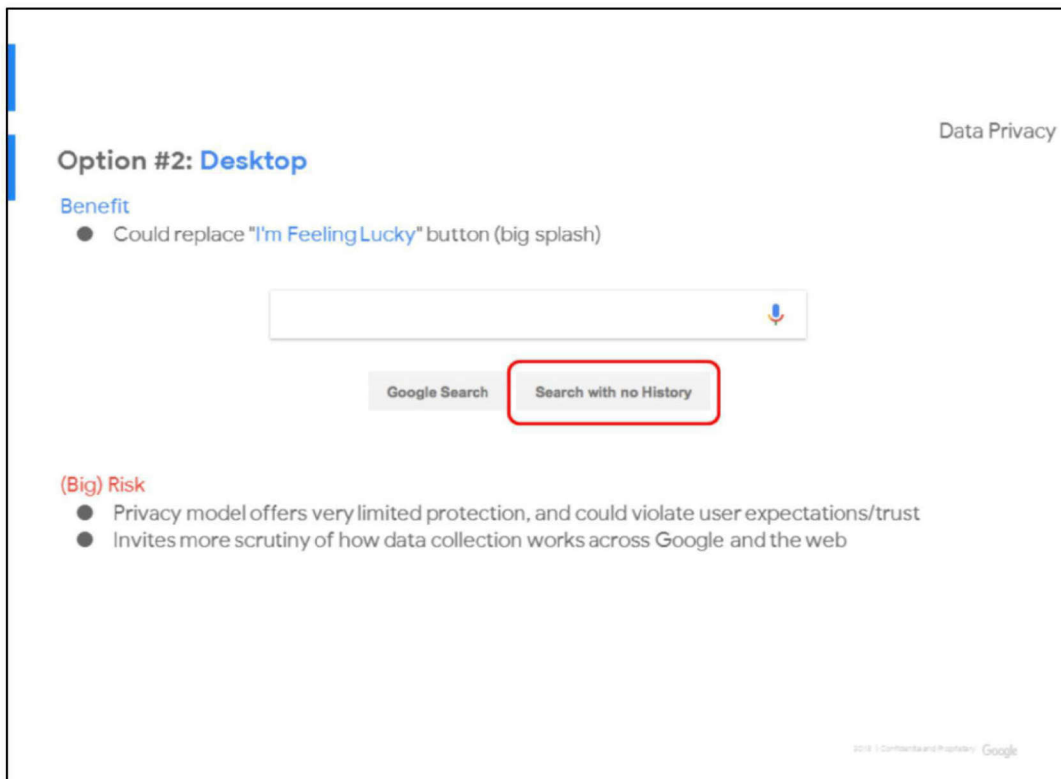
Danny: "I love this. I especially love the idea that search might have an on-demand option there in addition to perhaps having an incognito.google.com site that perhaps might be useful to maintain."

GOOG-RDGZ-00018618

GOOG-RDGZ-00018619
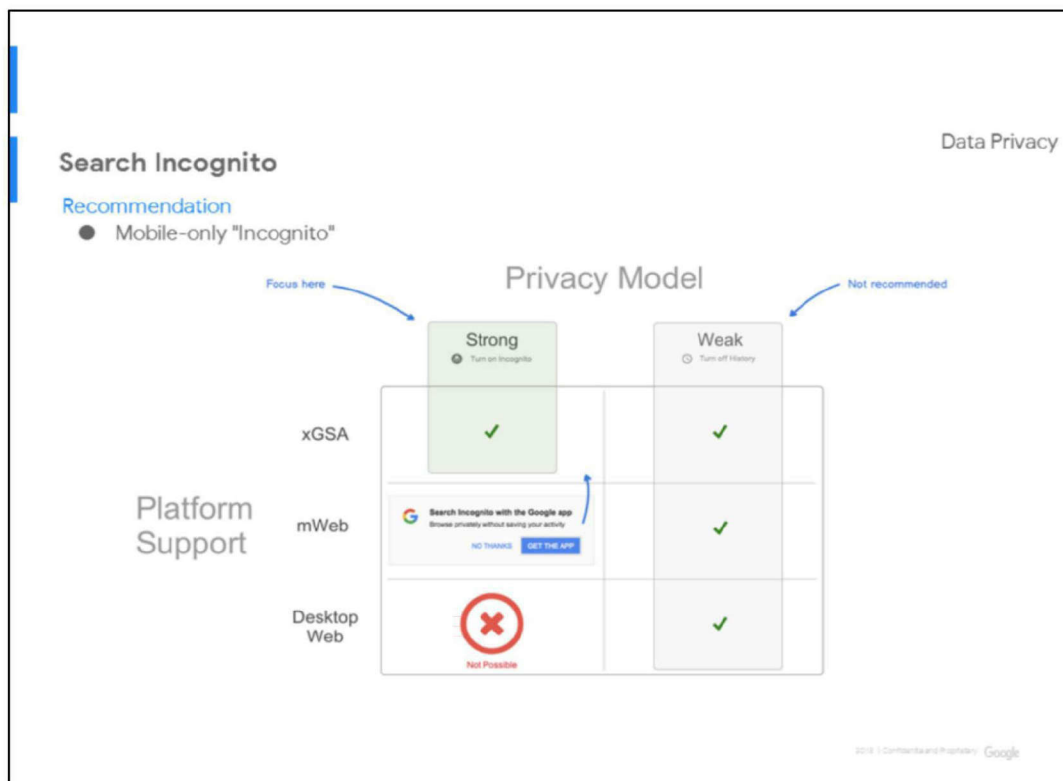
Id	Date	Text
7	06/11/2018 22:59:29	6/8 review: Move forward in exploring mobile-only Incognito in GSA.

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ıl. insights lab

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Ranking Transparency

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(Demo link)

Ranking Transparency

Idea #1 - "Explore Ranking" Tool

Benefits
- Increase transparency without revealing too much
- Demonstrate inherent trade-offs in ranking, rather than "manipulation"

Risks
- Could create controversy that reduces trust in results instead of helping
- Cherry picking examples to further an agenda
- SEO gaming results

Positive Headline
- "For the first time, Google is revealing how its famous algorithm works."

Negative Headlines
- "Google's liberal bias proved!"
- "FoxNews vs NYTimes: which is more 'authoritative'?"

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Ranking Transparency

Idea #2 - "Why these results?"

Problem
- "Why am I seeing this result?"
- How can users discover "How Search Works" or Search Settings?

Audience
- Influencers + power users

Idea
- ⊙ → "Why this result?"
- "This result is based on..." → [Learn more] [Settings]

Benefits
- Visible on SRP; entry point to "How Search Works"
- Better consistency with Ads

Risks
- Would "signals used" vary enough across results?
- Helps SEO game ranking
- Can we do this in 2 months?

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Id	Date	Text
8	06/11/2018 23:00:45	6/8 review - Planning to explore this one further.

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Id	Date	Text
10	06/07/2018 18:32:39	That's a concern here. Some signals are used close to 100% or 0% of the time. Are there enough in the middle we could actually expose to make this worthwhile? +haahr@google.com can you recommend who I should talk to on ranking to better understand the answer to this and trade-offs involved?
2	06/08/2018 01:06:23	+schmidtl@google.com too
1	06/08/2018 06:01:17	an alternative would be to use the glif dots for this. is there a version of this that selectively shows why this result, when the signals are more interesting?
9	06/08/2018 06:01:17	yes, possibly. might feel mysterious/inconsistent if not clear why it shows up only sometimes. but may also be better to only call out if meaningful. (design exploration needed if we decide to pursue this one)
1	06/08/2018 06:27:34	+phiroze@google.com +elehman@google.com Eric or Phiroze could answer, but I'll admit I don't think there's a reasonable way to do this. I've wanted it for years, but it's even a hard thing for us to answer internally with full access to our debug info, which is why I have a team working on improving that. But there are no easy answers and any details end up being anodyne ("it ranked thanks to core relevance") or give too much a way.
1	06/08/2018 17:07:49	+1 to Paul's comments. For e.g. 'search-history' is used sparsely, as is location. We are definitely "aware" of location, but use it appropriately. I _really_ like this effort. It can be a useful way to help users. So, I would really like to see this thought out on cases where we are broken. ie: take a result where we show the wrong thing. And then see if this can help users. A missing one-box, or false-trigger, or bad image or irrelevant result is where this also has to have utility to users. Finally, I think we should lead with the point that we are constantly trying to make search better. And without addressing that at the start (in the document), we might seem evasive.
11	06/08/2018 17:59:54	Thanks, great input. If we decide to explore this further (based on discussion today), let's find time next week to discuss and understand better what might be possible here.

Data Retention

PX-184.0034 of 0058

GOOG-RDGZ-00018628

Data Retention

Problem

Today, if users are concerned about privacy, they only have a few options:
- Sign out or use Incognito
- Opt-out of settings (WAA, LH)
- Delete data in MyActivity (manual, one-time)

Delete by topic or product

Search by keyword or filter by product, then select Delete results from the more
options ⋮ menu, to delete all matching activity

TRY IT

Delete by date

Today ▾

After June 5 ▾   Before June 5 ▾

All products ▾

DELETE

Google

GOOG-RDGZ-00018629

Data Retention

Idea #1 - Shorter retention

Announce a shorter data retention policy for Search (e.g. 3 years).

Context
- Ads/Play have a 3y retention policy
- Search retention is currently indefinite

Benefits
- Significant change that puts privacy ahead of our business
- 3y retention across products is a clearer story
- Addresses the "Google collects and keeps everything" narrative
- Why does Google need my Search history from 5y ago anyway? Seems disconnected from any value I'm getting.

Risks
- Does anyone care about this other than regulators?
- Possibly degraded quality/personalization

Question
- How much data does Search need? Would we be comfortable with 3y retention?

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Data Retention

Idea #2 - Auto-delete

Give privacy-concerned users an option to auto-delete data after e.g.:
- 30 days, 1y, 3y, indefinite

Possible to leverage existing Footprints/Wipeout mechanism, using GDPR compliance work.

Benefits
- Gives concerned users something actionable to do.

Risks
- We can delete activity, but what about derived learnings?
- Users could forget they turned this on, and be surprised when something doesn't work well.
- Can this be Search-specific, or does it need to be Google-wide?
- Does anyone care about this other than regulators?

Analogy
- Auto-delete : Privacy :: 2FA : Security

Recommendation
- Consider a shorter default retention policy instead.

Google

See also: Automatic data destruction (Danny)

Auto-delete data could have revenue impact through conversion tracking, but likely very small.

Conversions typically happen in a 30-day window (and are very front-loaded such that over 90% of them happen in the first day), so my hunch is that even if you introduce an auto-delete feature after 30 days, there wouldn't be revenue impact. If you consider auto-delete windows smaller than 30 days, we should re-visit though.

GOOG-RDGZ-00018631

Id	Date	Text
12	06/13/2018 00:30:43	Agree. We didn't get to this one in Friday's review, but planning a follow up as Nick wants to discuss data retention options. In one sense, we have this problem today, as users can now delete their activity manually, while this would leverage the same mechanism but make it automatic. But agree we need to think through implications if we're going to draw attention or make this more prominent.
4	06/18/2018 18:28:32	+mholden@google.com We should think through implications from user model. Activity is easy to delete, but not sure how we (a) would be able to delete learnings from activity past that window (what would that mean? how would we practically be able to do that?), (b) how would we convey that nuance to the user.
1	06/18/2018 18:28:32	by the way, we only use 1 year of data for user model. So impact would only be on aggregated data, so i think it should be fine too.

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GOOG-RDGZ-00018632

Settings: Transparency & Control

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Settings

WAA & Private Results (SPYW) setting

Problem
- Search has existing stateful account-level controls that impact privacy (WAA) and personalization (SPYW), but they behave in inconsistent way and are difficult to explain

WAA (desktop & mobile), ~10% opted-out
- Pauses data collection
- Turns off some but not all personalization
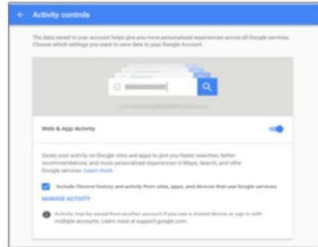
Private Results (desktop only), <1% opted-out
- Also turns off personalization

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GOOG-RDGZ-00018634
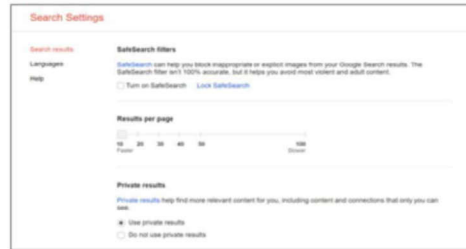
Settings

Idea # 1 - WAA is the account-level, stateful control for privacy & personalization

Idea
- Ensure that all personalization features check WAA (e.g. "my emails")
- Remove account-level Private Results bit
- Ensure easy flow for deletions (i.e. users turning off WAA are taken to My Activity)

Benefits
- Easy message (one persistent account-level control for Privacy & Personalization)
- Achievable in the short-term

Cons
- Forces users concerned only with one aspect of privacy / personalization to break features reliant on the other (e.g., "I don't want Google to collect search history, but I want to navigate home")

Recommendation
- We should do this but not for S20 announcement

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Id	Date	Text
1	08/21/2018 17:16:52	+mholden@google.com Did we consider splitting based on implicit/inferred vs explicit? In that case, I can still set my 'home' location explicitly without opting into the whole package. Seems like for feed this would also give us an opportunity to allow users to do explicit interest expression in cases where they have WAA off.

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GOOG-RDGZ-00018636

(Conceptual mock based on myaccount.google.com/activitycontrols and adssettings.google.com)

Ads

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GOOG-RDGZ-00018638

Ads

New Ad Settings (v6)

Idea
- The Ads team is launching updated Ad Settings this summer, and expanding coverage of "Why this ad" and "Mute this ad" across our network. (Ads Transparency & Controls).

Recommendation
- We're doing good work here, but may not be a topic to highlight proactively on stage.

GOOG-RDGZ-00018639

Ads

Consistent "Ad" annotation

Problem
- Some users are confused about which results are ads.
- We use multiple inconsistent labels ("Ad" and "Sponsored")

iPhone | Apple
[Ad] www.apple.com/

Idea
- Use [Ad] consistently across Search.
- Possibly other visual distinction.
- Messaging: "If it doesn't say "Ad", it's not an ad."

Benefit
- Consistency and clarity

Shop for allbirds loungers   Sponsored ⓘ

Risks
- Will this make any difference to confusion?
- Significant revenue effects.

Recommendation
- Ask Ads to explore, but not for S-20.

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Data Transparency
(Not for S-20)

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User Model Transparency

Problem

- Today, visiting MyActivity shows a long stream of activity.
- This highlights how much data Google has, without making it understandable or useful.

GOOG-RDGZ-00018642
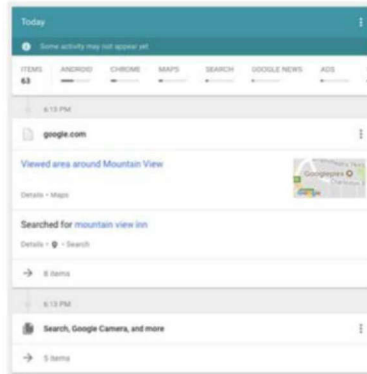
Id	Date	Text
1	06/08/2018 05:09:52	FWIW, My Activity added a robust search feature (which works especially well for Search clicks). <2% of visitors ever search, and the box sits prominently at the top of the page.

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GOOG-RDGZ-00018643

User Model Transparency

Idea

Aggregate activity into a more useful "Summary" dashboard
- Visualize my data and usage of Google products
- How have my interests changed over time ("My Google Trends"?)
- Give users control of (inferred) interests and affinities.

Analogy
- Android P "App Usage" dashboard.

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GOOG-RDGZ-00018644

User Model Transparency

Risks
- Will exposing interests increase or erode understanding/trust about how data works?
- How will users perceive mistakes, controversy, political topics?

Recommendation
- Start a project here (with user modeling team)
- Not for S-20 (needs prototyping, testing, iteration)
- Need to coordinate with Ads team

Id	Date	Text
1	06/08/2018 05:32:17	+pdelpierrepaul@google.com
1	06/08/2018 23:53:42	+1. We've already heard whispers of confusion around the difference in controlling Google Feed (f.k.a Google Now) interests and Ad Settings interests. Agree that our teams should partner on this.
2	06/15/2018 20:56:18	I heard there was past discussion about "linking" AudienceOne and Anima interests. A1 would be higher level, but inferring or blocking would would have clearer relation/effect on the other. Is anyone working on that?
1	06/15/2018 23:36:04	please also reach out to ads team -- we have user labels that we expose in ads settings / why this ad, will be good to make sure we do not confuse the user with wildly different organic vs ads labels +jkrafcik@google.com +bradbender@google.com
2	06/15/2018 23:36:04	We chatted to learn about each other a while back but no concrete plans were ever made. We probably should chat again...

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insightslab

GOOG-RDGZ-00018646

Recommendations

For S-20:
- Put main focus on "Search Incognito" (mobile only) and "Why these results?"
- Estimate revenue impact with finance/ads teams
- Consider shorter data retention policy in coordination with policy/PDPO

Separately:
- Staff projects to redesign Search settings and prototype user model transparency

Google

Recap

	Theme	Idea	Decision/Status
Last time	Data Privacy	Search Incognito	Yes - Pursue on xGSA (in flight)
	Ranking Transparency	"Why these results?"	Yes - Explore for S-20
		"Explore Ranking" tool	No - High risk (explore for more limited audience)
Today	Data Retention	Shorter Retention	
		Auto-Delete	
	Settings	Simplify WAA	
		Redesign Search Settings	
	Ads	New Ad Settings (v6)	
		Consistent Annotation	
	Data Transparency	User Model Summary	(Not for S-20)

GOOG-RDGZ-00018648

Discarded Ideas

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GOOG-RDGZ-00018649

Hide ads and paid content [sergioc]

Problem
- Some users suspect *all* content that ranks in search is in some way sponsored
- These users don't trust labels and assume all is paid for

Idea
- On a per-search basis, allow users to hide all sponsored content
- Returns back to normal when user taps on hidden ad, reloads page or on next search
- Messaging: "We want you to know what's sponsored and what isn't"

Benefit
- Transparency & understanding

Risks
- This is effectively an ad blocker; once we've offered this, why only temporary?
- Third parties find ways (e.g. via extensions) to turn on hidden mode by default
- Revenue impact

Recommendation
- Needs discussion before pursuing

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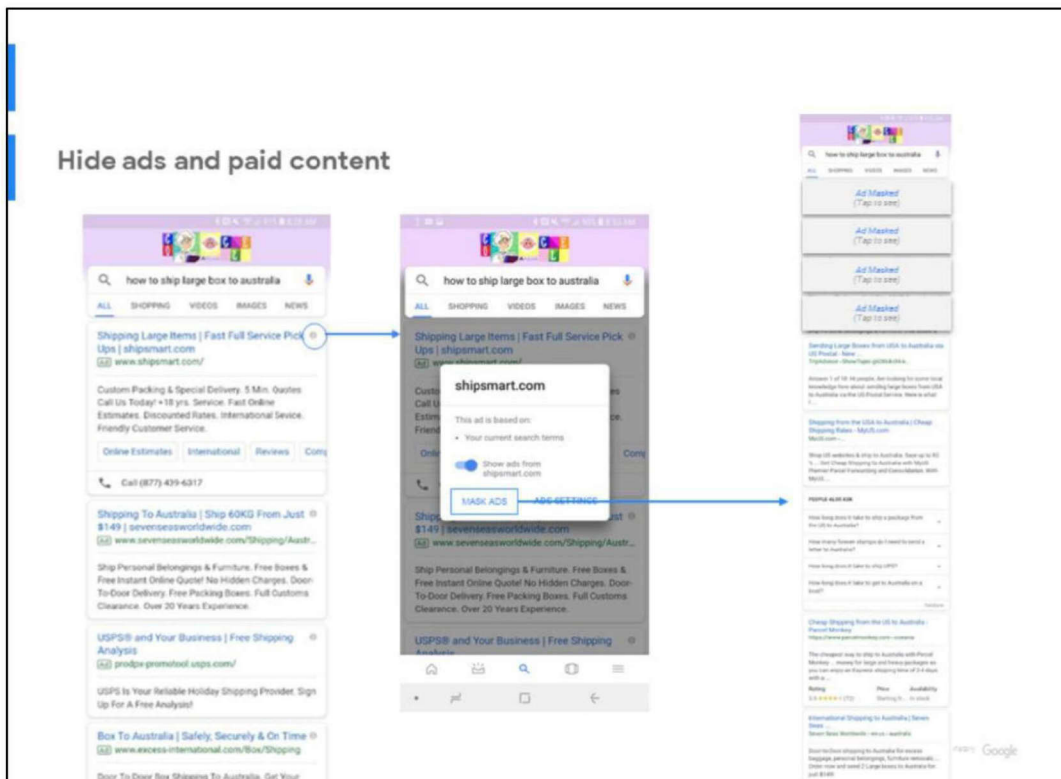
GOOG-RDGZ-00018651

PRODBEG: GOOG-RDGZ-00018595
PRODEND: GOOG-RDGZ-00018651
PRODBEGATT:
PRODENDATT:
CUSTODIAN/SOURCE: Dave Monsees
DOCTYPE:
FILENAME: Trust & Privacy @ S-20_1Hbk23U9knqAVyAo8ZpSoxH27GT-1RClm2_IRiBDqfEg.pp-
        tx
DOCEXT:
DOC TYPE:
PAGES:
FILE SIZE:
AUTHOR: mholden@google.com
DATECREATED: 06/04/2018
DATELASTMOD: 08/27/2018
DOCTITLE: Trust & Privacy @ S-20
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
CONFIDENTIALITY: HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY
PRODVOL: PROD006
REDACTED: N
MD5 HASH: ABBCC7D479896728853B18AF7E6EBD5D

PRODBEG: GOOG-RDGZ-00018595
PRODEND: GOOG-RDGZ-00018651
PRODBEGATT:
PRODENDATT:
PARENTBATES:
ATTACH:
NUMATTACH:
CUSTODIAN/SOURCE: Dave Monsees
ALLCUSTODIANS: Dave Monsees
DOCTYPE:
DOC TYPE:
FILENAME: Trust & Privacy @ S-20_1Hbk23U9knqAVyAo8ZpSoxH27GT-1RClm2_IRiBDqfEg.pp-
        tx
DOCEXT:
PAGES:
FILE SIZE:
AUTHOR: mholden@google.com
OWNER: mholden@google.com
DATECREATED: 06/04/2018
CREATEDTIME:
DateTimeCreated: 06/04/2018 9:58:00 PM
DATELASTMOD: 08/27/2018
LASTMODTIME:
DateTimeMod: 08/27/2018 5:28:00 PM
DOCTITLE: Trust & Privacy @ S-20
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY: HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY
REDACTED: N
REDACTION TYPE:
PRODVOL: PROD006
FILEPATH:
MD5 HASH: ABBCC7D479896728853B18AF7E6EBD5D

Pines

Looking at the bigger picture on our t.n pinecone research results

adebooij@, lasch@

Pinecone 1-6, Sept 2017

go/pines

PX-186.0001 of 0060

Id	Date	Text
1	05/17/2018 18:55:53	+adebooij@google.com
		- What was the context of this summary / report? Presentation at trust.next program review?
		- Do we want to create a new one for Pinecone 7 and beyond? How often should we be summarizing Pinecone studies and results? (is this similar to Durable Insights?)
		Assigned to Arne de Booij

Note

This is a living document. As we gather more research data, we'll update our insights. Feel free to leave your thoughts here at any point in time.

Thank you,
Anne & Arne

Google

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GOOG-RDGZ-00018352

Content

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Topic deep links

- Broad Use Consent
- User Data Controls
- Escurel
- Universal Privacy Notices
- Dashout
- My Google

Google   2017 Trust.Next   Proprietary + Confidential   5
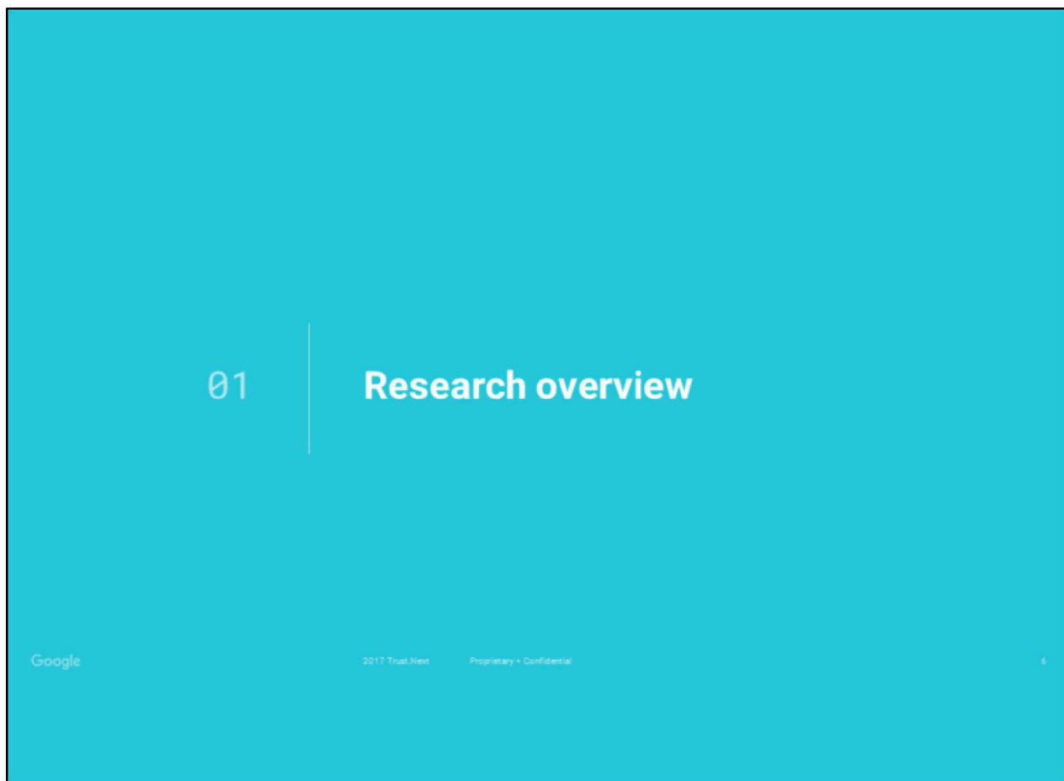
PX-186.0005 of 0060

GOOG-RDGZ-00018354

GOOG-RDGZ-00018355

GOOG-RDGZ-00018356

GOOG-RDGZ-00018357
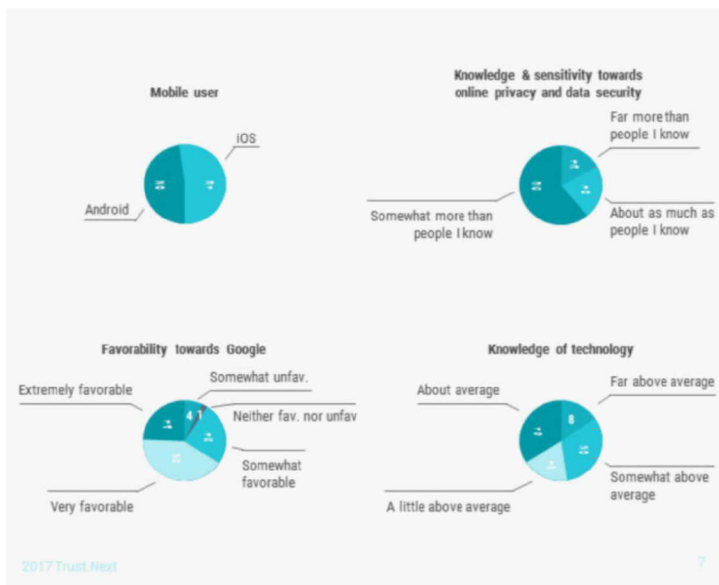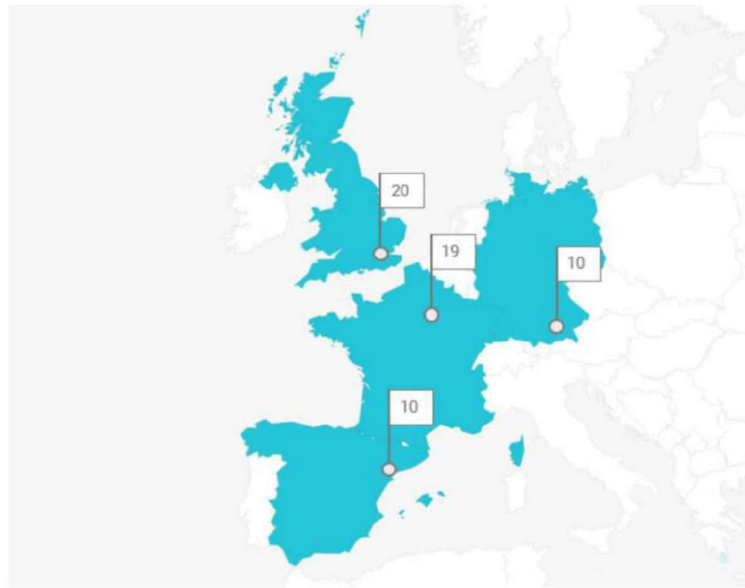
Research topics

Per study, participants interacted with multiple prototypes. A research topic was often part of more than one study.

This graph shows how many of the 59 participants interacted with prototypes for each topic.

*Although Broad-use Consent wasn't a separate topic in Pinecone 6, it was evaluated as part of Escurel

 # Participants per topic

Topic	Participants
PPR	10
Privacy policy	10
My Google	19
UPN	20
Escurel	29
UDC	30
Dash-out	39
Broad-use Consent	49

Google

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GOOG-RDGZ-00018359

GOOG-RDGZ-00018360

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Id	Date	Text
1	09/04/2017 15:14:42	+lasch@google.com I've presented a few of these main insights at PR last week (go/pinecone-pr). I am still finishing up the details. When would you have time to finish up the My Google and Dashout slides?

GOOG-RDGZ-00018362

Expectations play a huge role in consent

During BUC, UDC, Dashout and Escurel research, we found that it is often hard or impossible for people to formulate (accurate) expectations about how their experience will be impacted by their consent - both for the value they might get & the risk they are taking with providing us with their data.

When expectations are unclear, people will pick the least risky option - which is often the one where they don't consent to us using their data and miss out on value.

Google

What if...

...we gave people a trial period, let them try out how they like their new settings and tell them we will get back to them in a week or two so they can evaluate their experience, form expectations and offer them a choice to reconsider.

UPN ideas align with this. Also, UDC.next is considering ways to make it easier to understand the impact of turning on a setting.
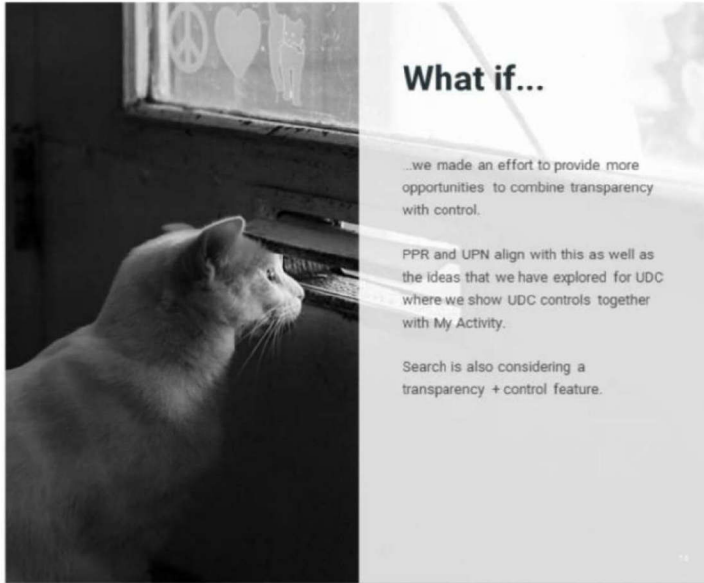
GOOG-RDGZ-00018363

Id	Date	Text
1	09/20/2017 06:45:12	The headline on the left doesn't fully reflect your takeaway. Isn't it more accurate to say something like "Uncertainty leads to risk aversion"?
2	09/20/2017 06:45:12	Yes and no:
		What I want to convey is that being able to form accurate expectations is a large factor in whether a user will consent or not. the insight below shows what happens when a user can't form that expectation which leads to risk aversion. On the other hand, when they can form accurate expectations. they'll be more comfortable accepting.
2	09/20/2017 06:46:14	Can you edit down the text on the left so both the left and right sides can be the same font size (12).
3	09/20/2017 06:46:14	or I change the font size on the right ;)

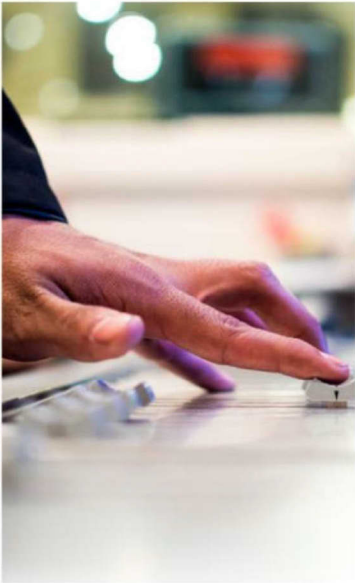GOOG-RDGZ-00018364

GOOG-RDGZ-00018365

Id	Date	Text
3	09/20/2017 06:51:26	Based on your description on the right in the first paragraph it sounds like people liked the transparency even before they saw controls. Is that true? What if it was their own data--do you think that would have made a difference?
4	09/20/2017 06:51:26	yes, I would say that was true; Google coming clean about what data we have stored about them. Being honest.

With a lot of participants, you could see that they understood that this wasn't their data but as they were using Google as well, it did give them the knowledge that this also means that Google is collecting this data about them as well. |

GOOG-RDGZ-00018366

During My Google*, BUC we saw that even when controls are linked with personal data, the options for controls can easily be overlooked. (WIP mocks)

GOOG-RDGZ-00018367

GOOG-RDGZ-00018368

Id	Date	Text
4	09/20/2017 04:55:43	Have you read the Schaub paper on privacy notice recs? Some good ideas. Also talk to Patrick Gage for other suggestions. https://www.usenix.org/system/files/conference/soups2015/soups15-paper-schaub.pdf
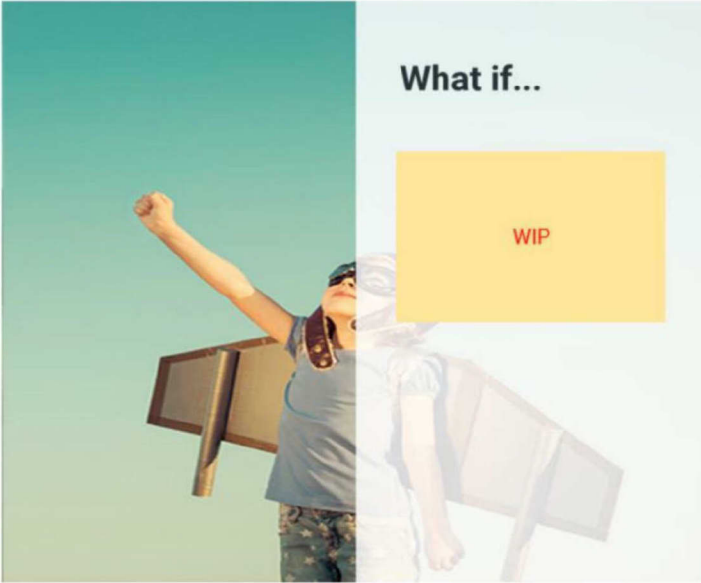
GOOG-RDGZ-00018369
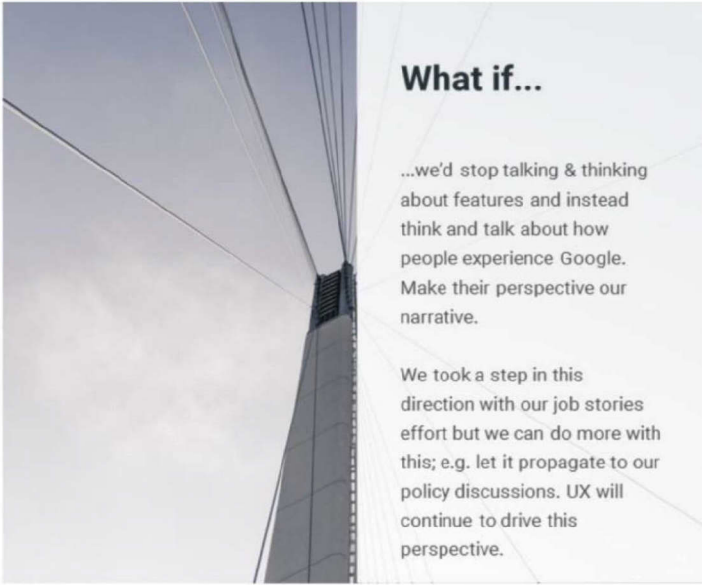
If we provide tools purely for the sake of transparency we should let users know to not create wrong expectations.
We incorporated educational content in our products, in a fun, entertaining way. Compared to other products Dashout is about exploration and learning, and not strictly task-driven. So why not use this opportunity to explain how we use all this data for great personalization?

GOOG-RDGZ-00018370

Id	Date	Text
1	09/18/2017 14:30:43	+adebooij@google.com added this, but feel free to edit. also done with the rest of my slides.
6	09/18/2017 14:30:43	I made some edits and tied in an insight from UPN and BUC. it does deviate a bit from your original angle but I hope it still applies. What what-if might have to updated too but the core message of 'how we use this data for personalization (which is value to some)' still stands
5	09/20/2017 06:58:55	If people are task/utility-driven, it feels a little counter-intuitive incorporate fun/entertainment. Or perhaps I'm misreading your suggestion? Also, as you know, explaining how we use the data for personalization is easier said than done for many products (e.g., it's easier for Assistant, harder for Search). It would be useful if you could include links to products/suggested UIs that are doing a good job showing the value of data collection, e.g., Google Maps Timeline
5	09/20/2017 06:58:55	+lasch@google.com

GOOG-RDGZ-00018371

For our users, everything we do is connected

When we evaluated the various product areas within a single session, it always struck us that people connected their experience with one topic to another topic.

To anyone but us, they're not interacting with a feature but with Google.

Google

What if...

...we'd stop talking & thinking about features and instead think and talk about how people experience Google. Make their perspective our narrative.

We took a step in this direction with our job stories effort but we can do more with this; e.g. let it propagate to our policy discussions. UX will continue to drive this perspective.

During My Google*, BUC we saw that even when controls are linked with personal data, the options for controls can easily be overlooked. (WIP mocks)

GOOG-RDGZ-00018372

PX-186.0024 of 0060
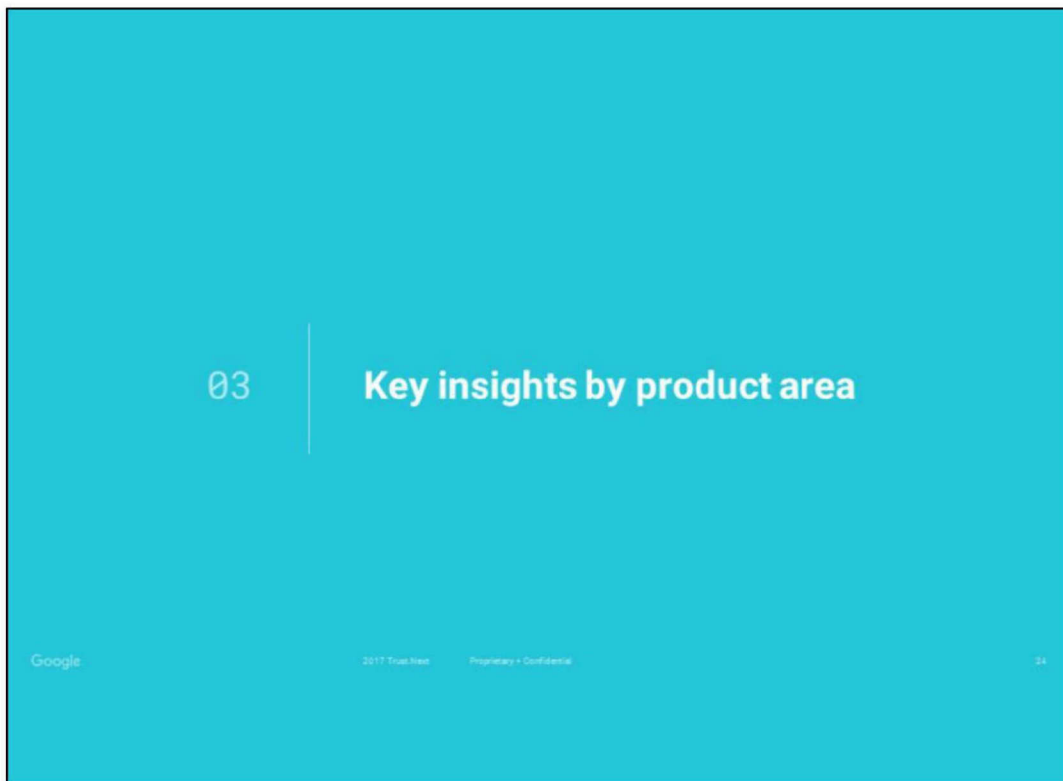
Broad Use Consent

Focused on measuring comprehension of the broad consent flow as well as impact on sentiment.

Main research questions

1. To what extent participants comprehend the consent text
2. To what extent participants comprehend the impact of their choice on their online experience (e.g. the ads they see)
3. How the text impacts attitudes towards Google for privacy, trust and sentiment.

All issues are logged in Buganizer

Team: mahalia@, dinalamdany@, kittock@, nguyenca@, adebooij@
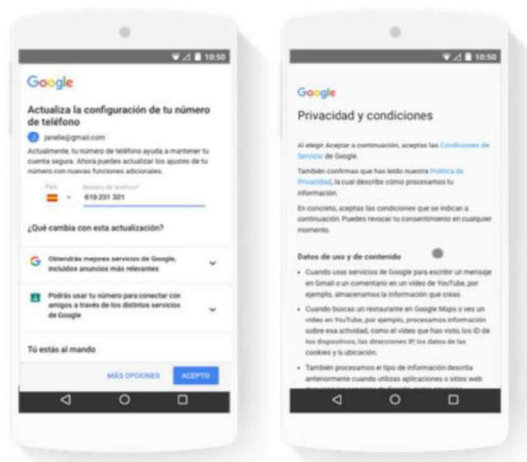
Google   2017 Trust Next   Proprietary + Confidential   25

GOOG-RDGZ-00018374

Broad Use Consent

Comprehension of what will happen with your phone number impacts choice

When people don't have a clear enough expectation of what Google will do with their phone number, this uncertainty influences the choice they will make and, if possible, they will choose the option with the least amount of risk.

More details

Leading the consent with the most controversial message ensures people don't miss it

For people that take at least some time to read the consent, we learned that by leading the consent with the potentially most controversial message ensures that people don't miss it. Especially with consents that cover more than one use, people often assume the first message covers the entire consent

More details.

Consent needs to bring clear value to the user, otherwise only risk will guide decision

The main value of Broad-use consent was security, reachability and a more personalized experience with tailored ads.

Besides security, people that read the consent didn't clearly understand and/or see any clear value which resulted in many of these users not consenting to Broad-use Consent.

More details

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User Data Controls

Measure comprehension of UDC setting in the Consent flow, findability of UDC setting in My Account and usability of changing UDC setting on the Activity Controls page.

Main research questions

1. Do users comprehend what will happen if they turn on the Web & App activity setting (in the context of an app)?
2. Does adding My Activity in UDC setting help comprehension?
3. Can users find WAA in the updated My Account design?
4. Can users find where to turn off WAA?

All issues are logged in Buganizer

Team: branimir@,robertbrauer@,osoriosantos@, dcorrigan@,,adebooij@

Google   2017 Trust.Next   Proprietary + Confidential   27
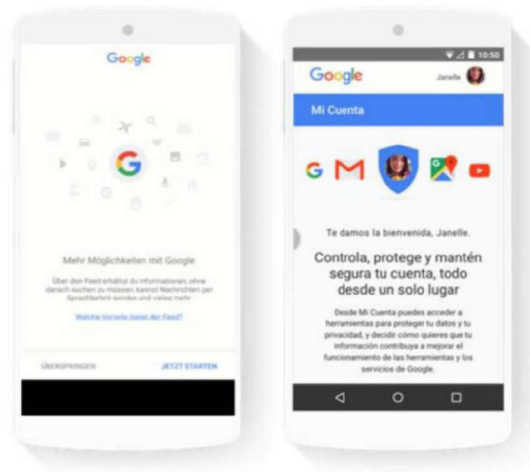
User Data Controls

Combining User Data Controls with the My Activity it controls helps comprehension

We iterated on the design of combining UDC with My Activity on the Activity Controls page in and our final design, combining transparency and control in one view, helped people understand the effect of changing an UDC setting.

This doesn't mean everybody understands 100% but it increased comprehension.

More details

It is next to impossible for people to understand what they're consenting to, even if they read all text

When people get presented with a UDC dialog in a Consent flow, most don't read it and thus won't know what they're consenting to or what the value is to them. The people who do read it can't explain clearly what the impact of their choice is on their experience on Google.

We put a lot of effort into the text but it is still too complicated for people - because it is.

More details

People expected to be able to choose during consent for UDC in an app context

When an app, like AGSA, asked for multiple UDC consents at the same time, some people expected choice - to be able to consent to some of the activity controls and not others.

More details

Google   2017 Tr...etary + Confidential   28

GOOG-RDGZ-00018377

Escurel

Evaluate user's comprehension of the
personalization option when creating a new
account.

Main research questions

1. Do users comprehend the options we show
    them?
    a.   Consequences of turning off or on?
2. Do users understand why Google is offering
    these options?
3. Do users opt-in or opt-out of options and why?
4. Can users interact with the expanded area?
5. More info pop-ups, why do people open these?

All issues are logged in Buganizer

Team: branimir@, robertbrauer@, admirh@, dcorrigan@,
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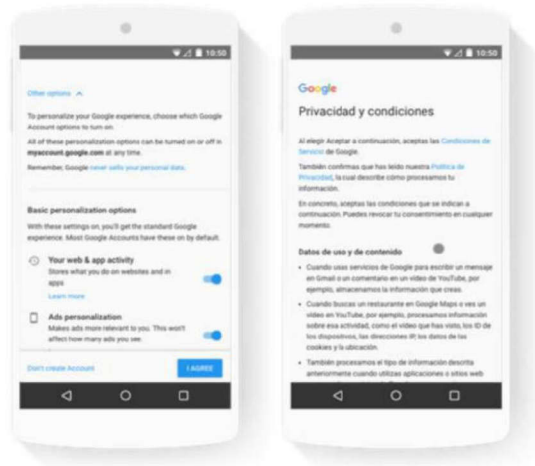
Google   2017 Trust.Next   Proprietary + Confidential   29

GOOG-RDGZ-00018378

Escurel

Google providing choice during account creating is very much appreciated by people

When people discovered that they could make a choice, this feeling of control elicited positive feelings like empowerment. In the past, we have also found that feeling of control is crucial to build trust.

More details

When given a choice, people will make changes that reduce risk and increase value

When people took a closer look at the Escurel options, almost all decided to make at least one change to the settings. Most turned off a setting that was on by default, reducing their perceived risk. One item that was off by default was turned on by almost half of people, mainly because they thought it would provide them more value.

More details

It is very hard for people to understand the consequences of their choices

As people make choices in the Escurel area, most thought it would impact their experience on Google but it was very hard for people to verbalize exactly what would change.

This uncertainty requires more trust.

More details

Google   2017 Trust Next   Proprietary + Confidential   30

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go/pinecone2-results
go/pinecone6-results

GOOG-RDGZ-00018380

Universal Privacy Notices

UPN is highly appreciated by people

When people were presented with the reminder about the state of their security and privacy settings, almost all appreciated this. Some were, at first, somewhat negative because it made them realize the amount and depth of data Google collects (transparency) but even for these, the fact that they can control eased their mind. It might not solve all transparency concerns though.

More details

Context impacts understanding of scope of data collection and use

When we notified people about the existence of an activity control in the context an app people assumed the control was just for that particular app. They didn't understand that the control applied to all of Google. When we sent a notification to people, most weren't sure why they were getting the notification now. They didn't immediately relate it to an app they just used saving data to their Google account.

More details

Benefits of sharing data with Google need to be clear

When we told people about "how their data improves Google services", the message wasn't well understood by half of them. This, in turn, caused these people to not see the benefit to them from Google storing their information.

More details

Google

2017 Trust.Next   Proprietary + Confidential   32

GOOG-RDGZ-00018381

Dashout

Evaluate comprehension and usability of the new
Dashboard that provides users with an overview
of their data and options to download it

Main research questions

1. Do users understand the data summary
   overview?
2. Do users understand how to download all
   or parts of their data?
3. Do users understand how to access
   additional settings (e.g. activity controls)?
4. Do users understand how to move data to
   a different service?

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dcorrigan@, lasch@
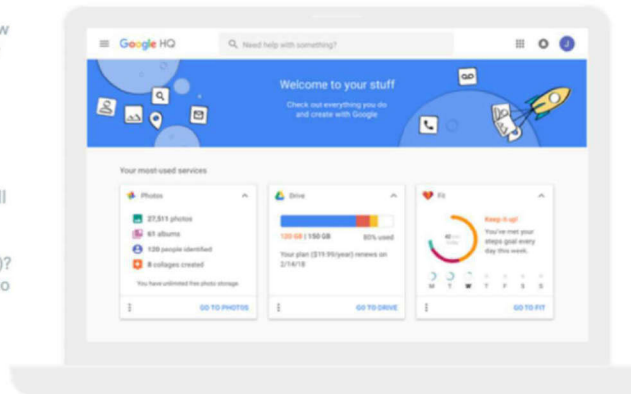
Google   2017 Trust.Next   Proprietary + Confidential   33

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GOOG-RDGZ-00018382

Dashout

Users love to see insights, instead of just raw data

While users understand that the Dashboard gives them an overview of their data, some tried to find utility beyond that. Initially they were referring to it as their new homepage giving quick access to Google services, but real value lies in seeing data insights, e.g. showing them how they compare to others or themselves over time.

More details

3-column design is more appealing and helps to discover functionality

The initial 1-column design wasn't as compelling and visual for users. While users understood the offered functionality, there was little interaction with it. With the new layout we observed more engagement with the Dashboard which led to discovering functionality through exploration.

More details

Highlighting top 3 services is appreciated, yet, users wish for control

Users understand and liked the difference between top 3 services and the full list as it helped to navigate the content more easily and without being overwhelmed. Users wished though to be able to choose the top 3 services which might just reflect the basic need of feeling in control.

More details

Google   2017 Trust.Next   Proprietary + Confidential   34

GOOG-RDGZ-00018384

My Google

Users forget about all the non-Google services they are using with their Google Account

Connected services was therefore appreciated by users as it provides them with an overview of the services they use with their Google Account, and an option to manage them.

More details

Inferred information is most often misinterpreted

Users perceived inferred information, such as travel or interests, as advertising. Instead of seeing an option to control and edit the knowledge Google gathered, they are more focused on the implications this has for them.

More details

Google   2017 Trust.Next   Proprietary + Confidential   36
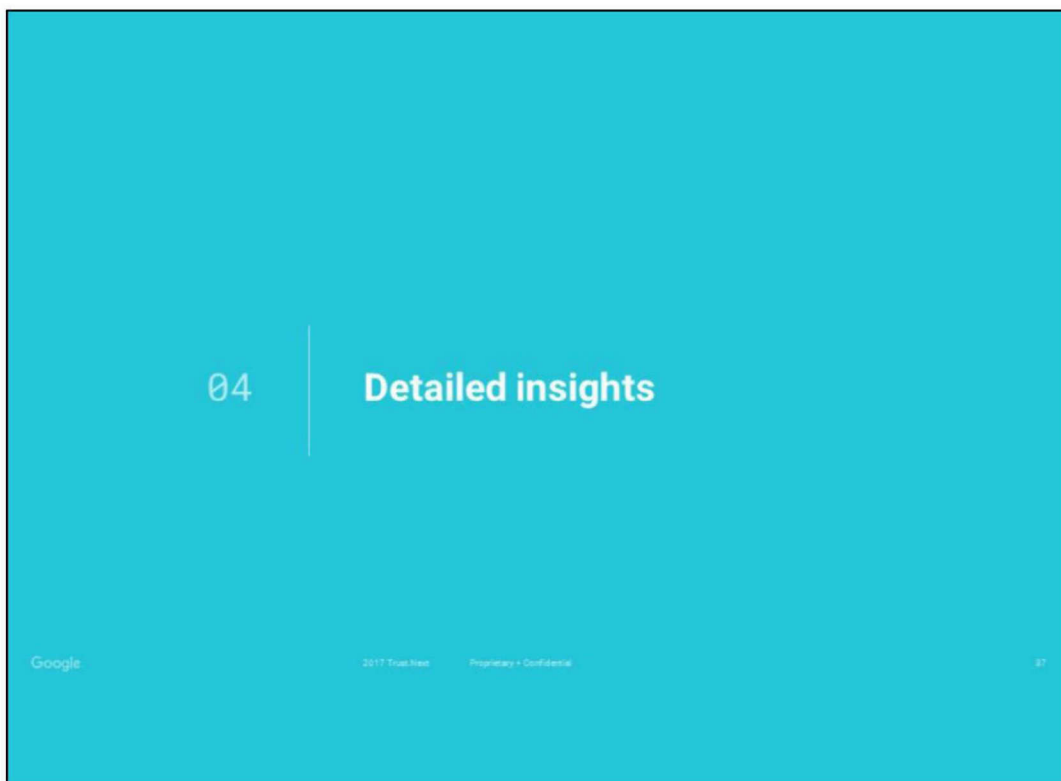
PX-186.0036 of 0060

GOOG-RDGZ-00018385

04 | **Detailed insights**

GOOG-RDGZ-00018386

Broad-use consent

Comprehension of what will happen with your phone number impacts choice

Observation

From the 57* participants that interacted with an iteration of Broad-use consent, 40 (79%) did not choose the 'Broad-consent' option.

96%** did not understand how their phone number would be used for Ads

93%*** did not understand how their phone number would be used for Reachability

Several participants in each study mentioned, unprompted, they consider their phone number a sensitive piece of information.

For Ads, people mentioned options like getting SMS messages, getting calls, gettings Ads based on their location.

For Reachability, several mentioned that they thought this would uploading their entire contact list to Google

Analysis

When people don't have a clear enough expectation of what Google will do with their phone number, considered to be sensitive personal data, this uncertainty influences their choice.

If possible, they will choose the option with the least amount of risk.

People consider their phone number as sensitive personal information, even more so than their search history [68% would not be willing to share their mobile phone number with a search provider, vs 61% their search history (2012), website history 21%, mobile phone 46% as one of the three most sensitive items (2015)]

In a recent experiment for BUC, of the people (12,3%) that went to More Options, almost all opted out of BUC.

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*2 participants from Pinecone1 were excluded because of moderator error
**49 participants - Pinecone 2 didn't rate this
***42 participants - Pinecone 2&3 didn't rate this explicitly

PX-186.0038 of 0060

Id	Date	Text
10	07/17/2017 14:50:28	Need data from BUC experiments here. Also add data from Narnia 2.0 here
11	07/17/2017 14:50:28	BUC https://docs.google.com/presentation/d/1ezINVoXkP1-Y6FXHhSqmAhHBplunitTMI5O1U8KI9Hg/edit?hl=en#slide=id.g1e971376c7_0_0
		Narnia https://docs.google.com/spreadsheets/d/1nkSNjCABIg-246fDqKr6Gls1Fmu27KehUYpZecPFZzM/edit#gid=0
8	07/17/2017 14:56:16	https://docs.google.com/document/d/1zbcAQ-ziJ5b83FIXkb962g2BiqAl8cMZEpsmYtvwGkM/edit
		GB users. 68% would not be willing to share their mobile phone number with a search provider, vs 61% their search history (2012)
7	07/17/2017 15:10:52	Find data on sensitivity of phone numbers
9	07/17/2017 15:10:52	https://www.slideshare.net/BrandLeadershipColum/what-is-the-future-of-data-sharing
		People make distinction between types of data
		2015 – website history 21%, mobile phone 46% as one of the 3 most sensitive items

GOOG-RDGZ-00018388

Broad-use consent

Leading the consent with the most controversial message ensures people don't miss it

Observation

During the first two rounds of research, during initial reading, **17/18** thought the consent message was just about security. Even after more careful reading, people did not notice the usage of their phone number for Ads and Reachability.

When people afterwards discovered they also consented to Ads, it clearly evoked negative emotions with **9/18**.

In round 3, we placed the message related to Ads as the first message and this increased discoverability to 5/10 during initial reading and 10/10 got this after more careful reading. For the 5 people that hadn't noticed this initially, it evoked negative emotions when they realized this was part of the consent.

For rounds 4 & 5, we even added Ads to the header for the first section and this further increased discoverability to 7/9 & 4/10 during initial reading and close to 100% during more careful reading.

Analysis

We know most people don't read the consent text when presented to them in their Google experience, but for those that do spend some time, placing it as the first message or even heading, increases the chance they will get this part of the message, which also prevents negative feelings later one when they find out they did consent to something they didn't want.

Especially with consents that cover more than one use, people often assume the first message covers the entire consent.

Google   2017 Trust Next   Proprietary + Confidential   40

In round 1, 2 partipants were excluded from part of the BUC session data because of moderation errors

GOOG-RDGZ-00018389

Id	Date	Text
12	07/17/2017 00:53:18	Do we have behavior for these people?
		Can we show namia 2.0 data and/or BUC experiment data

PX-186.0041 of 0060

Broad-use consent

Consent needs to bring clear value to the user, otherwise only risk will guide decision

Observation

The main value of Broad-use consent was security, reachability and a more personalized experience with tailored ads.

Besides security, people that were asked to read the consent didn't clearly understand Reachability (**93%**) nor Ads (**96%**) which resulted in low perception of value for both and ultimately in **79%** of these users not consenting to Broad-use Consent.

Analysis

There needs to be a reason or a value for people to provide their phone number to Google. To perceive this value, one needs to first understand what the value is they are getting. With many don't understanding Reachability and most perceiving little value in personalized Ads, there is really no value proposition to offset the potential risk incurred by sharing their phone number for these reasons

More security is often perceived as value and 54% people were willing to provide their number for this purpose only.

Google   2017 Trust Nest   Proprietary + Confidential   42

In round 1, 2 partipants were excluded from part of the BUC session data because of moderation errors

GOOG-RDGZ-00018391

Id	Date	Text
13	07/17/2017 00:53:18	numbers of value or reachability
14	07/17/2017 00:53:18	value of ads too

GOOG-RDGZ-00018392

User Data Controls

Combining User Data Controls with the My Activity it controls helps comprehension of UDC

Observation

In earlier research, we found that people don't understand the effect of changing the state of a UDC setting on the Activity Controls page, as well what PAUSED vs ON meant.

To fix this, we combined the UDC setting with My Activity and initially 2/10 understood the connection

In the 2nd iteration, 10/10 understood the connection but not everybody discovered the Activity as it was pretty far down the page.

In the final iteration, 10/10 people both discovered the Activity unprompted and understood the connection between the setting and the data.

Also, it helped understand the state of the button (ON vs OFF), which confused 5/10 in Pinecone 1.

Analysis

On the Activity Controls page, combining a UDC setting and directly showing what data has been collected because that setting is on shows clear effect of a user's action.
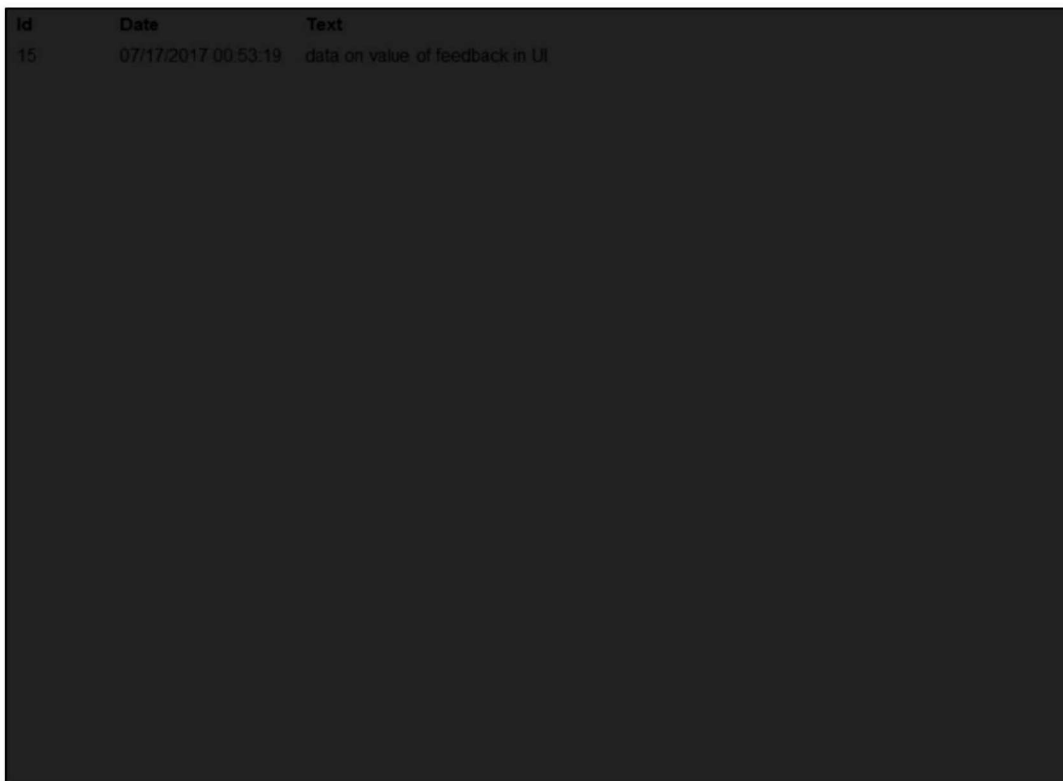
And even though people didn't fully understand the effect of turning on WAA, how it related to sWAA and on their entire Google experience, combining transparency and control in one view at least takes away some of the uncertainty and doesn't hide ways to control (delete) the data.

Google

2017 Trust.Next   Proprietary + Confidential

44

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CONFIDENTIAL

GOOG-RDGZ-00018393

Id	Date	Text
15	07/17/2017 00:53:19	data on value of feedback in UI

PX-186.0045 of 0060

User Data Controls

It is very hard for people to understand what they're consenting to, even if they read all text

Observation

It was hard for people, when reading the consent text, to understand that data would be collected from all Google products and that this would be used to personalize all products.

For example, during consent flow in Pinecone 3 and Web settings, **14/20** initially did not understand that data would be used to personalize their entire Google experience but more. In Pinecone 3, during consent flow, initially **6/10** did not understand data would be collected from multiple devices.

Google

Comprehension increases when people are asked to re-read the text in detail but topics like what sWAA is or what data is collected or what the data is going to be used for.

Analysis

The amount of text, the unfamiliar terms, multiple devices, sWAA vs WAA were all causes of this.

When people get presented with a UDC dialog, most don't read it and thus won't know what they're consenting to or what the value is to them.

2017 Trust Nest   Proprietary + Confidential

We're asking a lot of people that do try to read. The way UDC is setup of data collection is fairly complex and we can't talk specifically about how the data will be used by Google, which adds to the confusion.

We put a lot of effort into the text but it is still too complicated for people - because it is complicated.

44

What the hell is going to be collected, that it is across their Google account and that they can turn it off later?

Pinecone 3
Only 3/10 participants understand that their stored activity will be used to personalize their experience in this app as well as other Google apps and services.
6/10 Participants did not understand "data from multiple devices" correctly. Some thought it was about syncing content or settings across devices.

Pinecone 6
3/10 understood that when WAA is turned on, their activity across Google will be stored.
8/10 didn't understand the sWAA text and the effect this could have in their experience but this most likely caused by a translation issue of 'non-Google' to 'third party'

User Data Controls

People expected to be able to choose during consent for UDC in an app context

Observation

During a consent flow when an application, like AGSA, asked for several UDC consents at the same time, **12/20** people expected to be able to consent to some of the items and not others.

"I can't say yes this and no that. I don't want location history"

Analysis

We know that some information is deemed more sensitive than other information. Location seems to be more sensitive than e.g. search history and it seems natural that, when we ask for consent for a lot of different types of information, that people want to choose.

Also, as it is hard to form correct expectations on risk and potential value.

When there is uncertainty, users are prone to want to opt-out and not take the risk of something happening with their sensitive data that they might not want. Better safe than sorry.

Google   2017 Trust Nest   Proprietary + Confidential   47

4/10 expected choice in pinecone1, 8/10 in pinecone 3

GOOG-RDGZ-00018396

Escurel

Google providing choice during account creating is very much appreciated by people

Observation

When people discovered that they could make a choice, **20/29** participants considered having these options was something positive. They mentioned feeling of control, empowering by letting them decide and making them feel more secure. In Pinecone 4 & 5, 9/19 explicitly indicated an increased sense of control, 6/10 stayed the same and 4/10 decreased (if only slightly).

Analysis

It has been suggested that a sense of control is a deep human need. When a person feels out of control, they can feel uncomfortable. Feeling in control can elicit positive emotions like empowerment and moderate other negative emotional responses. Even if people don't actually engage in an act of control.

We also found that feeling of control is crucial to build trust.

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Pinecone 4- 7/9 considered that having the option to change the default setting was something positive
Pinecone 5 - 6/10 considered that having the option to change the default setting was something positive and felt in control.
Pinecone 6 - 7/10 had a positive feeling regarding why Google provided them with these options, mentioning things as customization, letting the user decide and explaining their services better.

Pinecone 4: 3 increase, 4 the same, 2 decrease
Pinecone 5: 6 increase, 2 the same, 2 decrease

Emotional user experience and feeling of control, 2014, Jussi P. P. Jokinen
In UX design, supporting feeling of control should be one of the primary goals, as it is evident that a positive UX as a response to the interaction is dependent on the mediating factor of feeling of control.
In other words, feeling of control during a stressful and frustrating interaction should restrain, that is, moderate, the negative emotional response from obstructive task events

https://docs.google.com/presentation/d/1QpaNOnNAvMiWEqG1FOqZMlwPBw8Q3Q_yBJnaEDwhScA/edit#slide=id.g13064756a0_1_880

GOOG-RDGZ-00018397

Escurel

When given a choice, people will make changes that reduce risk and increase value

Observation

When people took a closer look at the Escurel options, **27/29** decided to make at least one change to the settings.

- 14/29 turned off Ads personalization,
- 9/29 turned off WAA.
- Of these, 6/29 turned off both.
- 4/29 turned on Location history,
- 8/19 turned on Device information and
- 2/29 turned on Voice & Audio activity.

Analysis

As we prompted people to take a closer look at the controls, this doesn't reflect actual behavior on whether people will act on controls.

But, when they do, it seems that they tend to try and reduce potential risk of sharing this information. Turning OFF defaults that were on is much more common than turning ON defaults that were OFF.

One exception is Device information, which was turned on by 8/19 people.

We learned that people thought that this was a way to synchronize contacts and calendar items across devices. And as they saw value in this, they chose to turn this on.

Google   2017 Trust Nest   Proprietary + Confidential   49

Pinecone 4 - 8/9 participants decided to change the default settings. From those 8 participants that changed the default settings, 6 turned ON settings that were OFF and 3 also turned OFF settings that were ON.

Pinecone 5 - 10/10 participants decided to change the default settings. 3 changed the WAA default setting and turned it OFF, 6 changed the Ads option and turned it OFF, 1 changed the Location option from OFF to ON, 5 changed the Device to ON and 1 turned ON the Voice and Audio.

Pinecone 6 - 9/10 participants decided to change at least one of the default settings.

GOOG-RDGZ-00018398

Id	Date	Text
6	09/20/2017 07:14:49	Were the people who turned "off" things also likely to turn "on" things? Or was there a set of people who turned things off an a set who turned things on? (could be relevant for +mseg@google.com 's privacy sensitive segmentation work)
16	09/20/2017 07:14:49	Of the 6 people that turned OFF both settings that were ON by default, only 1 turned ON a setting (location history) that was OFF by default. The rest kept them all OFF.
		Of the 3 people that only turned OFF WAA, 3 turned ON Device Info, and 1 also turned ON location history.
		Of the 8 people that only turned OFF Ads Personalization, 1 turned ON WAA and 1 turned ON Device info.
		So, people that turn off a setting that is ON by default, are not likely to turn on another setting that is OFF by default.
		You can see all the behaviors in this sheet.
		https://docs.google.com/a/google.com/spreadsheets/d/1fHQPOAjqeTIWBlAWAwG0LA_dPF7Q dGM6YoanaZMnG70/edit?usp=sharing

GOOG-RDGZ-00018399

Escurel

It is very hard for people to understand the consequences of their choices

Observation

As people make choices in the Escurel area, most thought it would impact their experience on Google but it was very hard for people to verbalize exactly what would change.

In Pinecone 4, 5/7 were convinced their choices would affect their experience but they weren't sure how. In Pinecone 5, 1/10 clearly understood the consequences of making changes. Others understood some aspects or just couldn't imagine the effect.

In Pinecone 6, when people were asked specifically about the option Ads personalization, only 5/10 sort of understood what the effect would be.

Analysis

As we're not (and we maybe can't) providing explicit examples of the effect of the choices we provide, people will have to assume how it will affect their experience.

As most don't have a correct mental model of how Google uses their data to personalize their experience, their assumptions will either be incomplete or non-existent.

This creates a lot of uncertainty with people and to allow someone to still act in a state of uncertainty, more trust is required compared to when they do know what will happen.

Google   2017 Trust Nest   Proprietary + Confidential   51

Pinecone 4: 5/7 changed things and were convinced this would affect their experience, although there were not sure how (someone mentioned having less intuitive searches as a possible consequence). 2/9 considered nothing would change. Pinecone 5: 1/10 clearly understood the consequences of making changes to the default settings. Others understood some aspects or just couldn't image the effect Pinecone 6: 5/10 considered that having more personalized ads had no effect on the amount they would see: they would get the same number of ads as of now. 4/10 didn't know or didn't mention it. 1/10 thought she would receive less because since the system is restricting what type of things to show to her, the universe of possible ads gets smaller.

GOOG-RDGZ-00018400

Universal Privacy Notices

UPN is highly appreciated by people

Observation

When people were presented with the reminder about the state of their security and privacy settings, **16/20** appreciated this. **3/20** were, at first, somewhat negative because it made them realize the amount and depth of data Google collects but even for these, the fact that they can control eased their mind. We gauged people's feeling towards UPN in Pinecone 6 and found that average feeling towards Google based on their UPN experience was 6.6/9.

Analysis

As most consents that relate to opt-in for a UDC setting happen in the flow of another app and most don't pay attention at this point, people often not even know that they've given Google the permission to collect and use their data.

Getting a reminder from Google about the fact that Google is collecting data (transparency) AND that they can still change their mind (control) is seen as honest and caring.

It puts them in control of their own data.

Although, it might not resolve all negative feelings people might have towards Google as it do "It's kind of reassuring, it's kinda asking for my permission, but I still have a doubt... what they do with it, just how they use it.."

Google   2017 Trust Nest   Proprietary + Confidential   52

Pinecone 2: 9/10 were positive about having reminders of their security settings options.
Pinecone 6: 3/10 participants had a rather negative to neutral reaction to UPN but overall the fact that Google was letting them know and reminding them about the choices they made and allowing them to control their experience was perceived as positive.

Universal Privacy Notices

Context of the notice impacts understanding of scope of data collection and use

Observation

When we notified people about the existence of an activity control in the context an app people assumed the control was just for that particular app. They didn't understand that the control applied to all of Google.

When we sent a notification to people, 7/10 weren't sure why they were getting the notification now. They didn't immediately relate it to an app they just used saving data to their Google account.

When we used direct messaging that explicitly called out the specific activity controls the UPN was related to, it did increase comprehension of what the message referred (6/7) to.

Analysis

People don't seem to have a good mental model of how the activity controls work. This, in turn, impacts how they perceive a UPN which refers to the impact of the settings of these activity controls.

If we message them in context, they are likely to attribute the controls to just that context. If we show an UPN out of context, they won't be able to understand that their behavior in a context relates to all of Google.

Being very direct about the activity we are talking about seems to increase comprehension of what activity the UPN referred to but it didn't help them understand the scope of impact of the storing of that activity.

Google   2017 Trust.Next   Proprietary + Confidential   53

<u>Pinecone 2:Context of the message led people to believe the UPN was related to this video only and not Google in general. Context also led people to believe the message was related to 'privacy from others' rather than 'privacy from Google</u>
<u>Pinecone 6: 3/10 considered the reason why they were getting a notification was because Google wants to be transparent about what data they save or don't.</u>
<u>Pinecone 6: The notification message was much better understood in the Direct version: 7/10 saw that version and 6 out of those 7 clearly understood it was about saving their voice commands.</u>

GOOG-RDGZ-00018402

Universal Privacy Notices

Benefits of sharing data with Google need to be clear

Observation

When we told people about "how their data improves Google services", the message wasn't well understood by 6/10.

This, in turn, caused these people to not see the benefit to them from Google storing their information.

Analysis

People provide data to Google because it will help them get a better experience.

If they're not understanding how saving e.g. Voice activity helps them, they will be less likely to allow Google to store their data.

We need to be very explicit, whenever we talk about a user's data, about how this data helps them.

Just saying "improves your Google experience" probably won't cut it.

Google   2017 Trust Nest   Proprietary + Confidential   54

Pinecone 6: 4/10 participants understood it as a summary of the available functionalities related to voice commands.

GOOG-RDGZ-00018403

Dashout

Users love to see insights, instead of just raw data

Observation

19/20 users (Pinecone 2 and 3) perceived the Dashboard as an overview of the services they are using, however, the value was unclear to 9/20.

5/10 found the information in the cards not useful.

Analysis

While users generally understood that the Dashboard shows personal usage data, they often expected more utility. We need to better communicate the Dashboard's value (even if it is just for transparency, we should call it out).

In additional research outside of Pinecone we found that users get especially excited about seeing data insights, e.g. showing how they compare to others, or themselves over time.

Google   2017 Trust Next   Proprietary + Confidential   55

GOOG-RDGZ-00018404

Dashout

3-column design is more appealing and helps to discover functionality

Observation

In Pinecone 1 7/10 users mentioned that the 3-column design is visually more appealing.

Task success for downloading data increased from 30% in Pinecone 1, to 88% in Pinecone 4.

Analysis

We only had one study during which users would see different layouts side by side, but when they did the three-column layout was preferred. In addition we saw in the following iterations that users repeatedly highlighted positively the structure.

The design invited users to explore the prototype more thoroughly which lead to users discovering offered functionality, which ultimately helped them to solve tasks, such as taking out data.

Google   2017 Trust Next   Proprietary + Confidential   56

GOOG-RDGZ-00018405

Dashout

Highlighting top 3 services is appreciated, yet, users wish for control

Observation

9/17 (Pinecone 2 and 3) users expressed the wish to decide which top 3 cards to display.

In Pinecone 2, 6/10 users recognized the top 3 services, but the differentiation to the rest was not clear to everyone. In Pinecone 3, 9/10 understood and appreciated the distinction.

Analysis

Highlighting the most used services helped users to digest the dashboards content more easily and was generally appreciated. Throughout the iterations we kept hearing again the wish to customize the top section. Consider giving users the possibility to organize their dashboard as they see fit. "Most used" is not necessarily equal to "most important" for users, and this will also enhance the feeling of being in control.

Google   2017 Trust Next   Proprietary + Confidential   37

GOOG-RDGZ-00018406

My Google

Users forget about all the non-Google services they are using with their Google Account

Observation

In Pinecone 5, 8/10 people had a positive reaction towards the CONNECTED APPS&SITES as well as SERVICES&SUBSCRIPTIONS cards and expected to be able to manage the various accounts from there.

Analysis

While there was some confusion around how this would exactly work, users appreciated to have all their Google and non-Google services in one place, as they don't remember easily where they signed in with Google.

Google   2017 Trust Next   Proprietary + Confidential   54

GOOG-RDGZ-00018407

My Google

Inferred information is most often misinterpreted

Observation

In Pinecone 5, 7/7 participants didn't understand the INTEREST card as a means to change and adapt the identified interest. 6/8 misunderstood the TRAVEL card as advertisment.

Analysis

Users don't recognize the connection between inferred information and how this shapes their experience when using Google products. Thus they also have a hard time seeing the value of associated settings shown in My Google.

Google   2017 Trust Next   Proprietary + Confidential   59

GOOG-RDGZ-00018408

PRODBEG: GOOG-RDGZ-00018350
PRODEND: GOOG-RDGZ-00018408
PRODBEGATT:
PRODENDATT:
CUSTODIAN/SOURCE: Dave Monsees
DOCTYPE:
FILENAME: Pines_17cXK9SNUETd3Ca0j71PCCgts1gBRVV2oxknOEtPmxvs.pptx
DOCEXT:
DOC TYPE:
PAGES:
FILE SIZE:
AUTHOR: adebooij@google.com
DATECREATED: 07/10/2017
DATELASTMOD: 06/07/2018
DOCTITLE: Pines
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
CONFIDENTIALITY: CONFIDENTIAL
PRODVOL: PROD006
REDACTED: N
MD5 HASH: CCF0C0B7849AE98C0A5A85EEB576C727

PRODBEG: GOOG-RDGZ-00018350
PRODEND: GOOG-RDGZ-00018408
PRODBEGATT:
PRODENDATT:
PARENTBATES:
ATTACH:
NUMATTACH:
CUSTODIAN/SOURCE: Dave Monsees
ALLCUSTODIANS: Dave Monsees
DOCTYPE:
DOC TYPE:
FILENAME: Pines_17cXK9SNUETd3Ca0j71PCCgts1gBRVV2oxknOEtPmxvs.pptx
DOCEXT:
PAGES:
FILE SIZE:
AUTHOR: adebooij@google.com
OWNER: adebooij@google.com
DATECREATED: 07/10/2017
CREATEDTIME:
DateTimeCreated: 07/10/2017 2:09:00 PM
DATELASTMOD: 06/07/2018
LASTMODTIME:
DateTimeMod: 06/07/2018 7:09:00 AM
DOCTITLE: Pines
SUBJECT:
FROM:
TO:
CC:
BCC:
DATESENT:
TIMESENT:
DateTimeSent:
DATERCVD:
TIMERCVD:
CONFIDENTIALITY: CONFIDENTIAL
REDACTED: N
REDACTION TYPE:
PRODVOL: PROD006
FILEPATH:
MD5 HASH: CCF0C0B7849AE98C0A5A85EEB576C727